ELECTRON

PAYLOAD USER'S GUIDE

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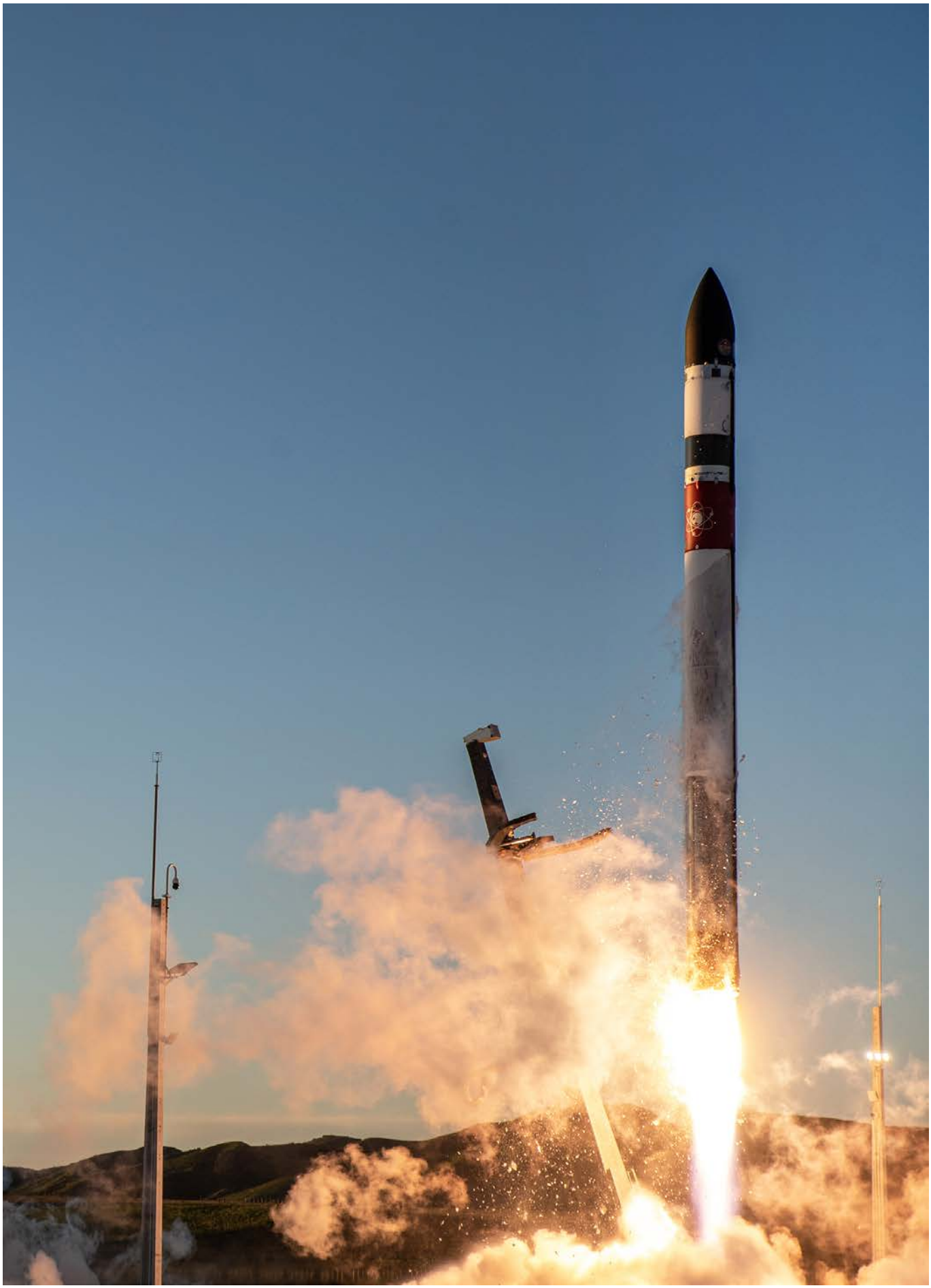
Rocket Lab USA, Inc.
rocketlabusa.com

ROCKETLAB



OPENING ACCESS TO SPACE

Small satellites are shaping the way we use space to innovate, explore and improve life on Earth.

Historically it has been slow, expensive, and challenging to get these small but incredibly capable spacecraft to orbit. Our Electron launch vehicle changed that, and revolutionized access to space.

Rocket Lab is enabling companies, students, scientists, researchers, governments and entrepreneurs alike to get their ideas to orbit right now. A solar system of possibilities has opened up for people who thought space was out of reach, until now. The satellites we launch are keeping countries connected and borders protected, they're monitoring weather and managing waste, they're providing insights on climate change, and helping us manage resources for future generations.

We believe getting to space should be easy, which is why we developed a launch experience like no other. Every detail of Electron has been designed for rapid production to support frequent and reliable launch for small satellites. Since our first launch in 2017, Electron has become one of the world's most frequently launched orbital vehicles. To give small satellite operators unmatched control over their launch schedule, we also operate three launch pads across the United States and New Zealand that can support more than 130 launches every year.

Every aspect of the launch process has been streamlined to make your mission simple and seamless, from idea to orbit.

Tell us about your mission. We look forward to making it a reality.

Peter Beck
Rocket Lab Founder and Chief Executive Officer

FREQUENT AND RELIABLE ACCESS TO SPACE ON YOUR TERMS

The world is increasingly reliant on space-based technologies to power our economies, to provide insights and data, and to maintain national security. The small satellites providing these vital services need frequent, reliable, and cost-effective access to space.

As the world's leading dedicated small satellite launch provider, Rocket Lab has made that access a reality.

ABOUT ROCKET LAB

Rocket Lab is the leading manufacturer of rockets and spacecraft for the global small satellite market. We deliver end-to-end mission solutions, from turnkey satellites and spacecraft components through to launch and on-orbit operations.

Rocket Lab's Electron launch vehicle provides frequent, reliable, and tailored access to orbit for small satellites. Launching since 2017, Electron has delivered more than 50 satellites to orbit for organizations including NASA, the Department of Defense, the National Reconnaissance Office, US Space Force, and a wide range of commercial companies. Electron is tailored to launch payloads of up to 300 kg from either of two active, state-of-the-art launch sites: Launch Complex-1 on the Māhia Peninsula in New Zealand and Launch Complex-2 on Wallops Island, Virginia.

Between our three pads at two launch complexes, Rocket Lab can support more than 130 launches every year. By maintaining the pads in a constant state of launch readiness on opposite sides of the globe, Rocket Lab delivers unmatched flexibility for rapid, responsive launch in support of a resilient space architecture. This enables an unmatched level of assured space access for small satellites.

Rocket Lab also designs and manufactures satellites and high-performance spacecraft components. Available in low Earth orbit configurations through to interplanetary exploration variations, Rocket Lab's family of Photon satellites enable our customers to do more, spend less, and reach orbit faster.

Headquartered in Long Beach, California, Rocket Lab is a United States company that operates launch sites in Māhia, New Zealand and Wallops Island, Virginia. Rocket Lab operates more than 5 acres of manufacturing facilities and test complexes, and employs advanced manufacturing techniques including 3D printing, to enable high-rate production of satellites and launch vehicles.

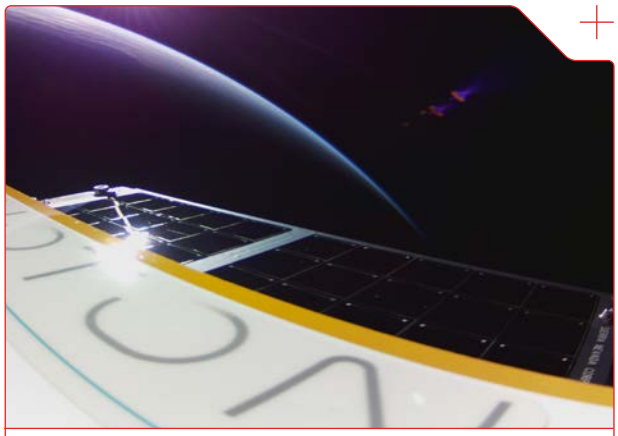
YOUR MISSION, YOUR WAY

Electron is a proven launch system delivering satellites to orbit now. Unmatched in reliability and experience, Electron puts small satellite operators in the driver's seat of their mission.

RESPONSIVE LAUNCH

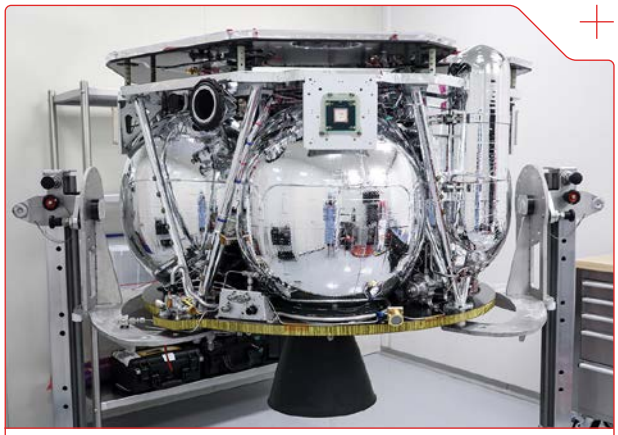
Responsive launch is the key to resilience in space. All satellites are vulnerable, be it from natural, accidental, or deliberate actions. The ability to deploy new satellites to precise orbits in a matter of hours, not months or years, is critical to government and commercial satellite operators alike.

It means uninterrupted weather monitoring, communications, navigation, early warning, and security systems - serving billions of people every day. Rocket Lab Electron vehicles and launch sites remain in a state of launch readiness to support rapid call-up launch, enabling fast reconstitution of constellations or individual satellites as needed.



YOUR ORBIT

Between our two launch sites in Virginia, USA and Mahia, New Zealand, Electron can deploy satellites to inclinations from 38 to 120 degrees. Thanks to Electron's innovative Kick Stage with its pointing and engine re-light capability, we can support plane changes, orbit raising and staggered deployment. This means our customers' satellites are deployed to precise and individual orbits, even when flying as a rideshare.



RESPONSIVE SATELLITES

We make launch easy, but we didn't stop there. For customers seeking a simple and streamlined path to orbit, we deliver flight-proven turnkey satellites, launch, and on-orbit operations as a bundled service. This unique solution enables you to do more, spend less and reach orbit faster.

MULTIPLE LAUNCH SITES

Rocket Lab operates two launch sites, delivering the highest number of launch opportunities globally - more than 130 each year. Rocket Lab's Launch Complex 1 in New Zealand can support up to 120 launches per year, offering unmatched launch schedule flexibility. Launch Complex 2 on Wallops Island, Virginia, is tailored specifically for government missions and can support up to 12 launches per year.

RAPID LAUNCH CADENCE

We have building rockets down to a fine art. Designed for rapid production, a new Electron can be built every 18 days. This high production rate ensures there are always launch vehicles on standby, ready to be assigned a payload for launch on your schedule. By not building to tail numbers, we provide unrivalled flexibility for on-demand launch and staggered deployment. This means our customers' satellites are deployed to precise and individual orbits, even when flying as a rideshare.

TAILORED TO YOU

No two missions are the same, so the Rocket Lab mission experience is tailored to you. Every aspect is customizable from idea to orbit. Our world-leading team will work closely with you every step of the way to make your mission a success.

OVERVIEW

This document is presented as an introduction to the launch services available on the Electron Launch Vehicle. It is provided for planning purposes only and is superseded by any mission specific documentation provided by Rocket Lab.

REVISION HISTORY

DATE	VERSION	HISTORY
Jun 2015	1.0	First Release
May 2016	2.0	Updated Release
Sep 2016	3.0	Updated Release
Dec 2016	4.0	Updated Release
Apr 2017	5.0	Updated Release
Jun 2018	6.0	Updated Release
Jul 2018	6.1	Updated Release
Aug 2018	6.2	Updated Release
Apr 2019	6.3	Updated Release
Jun 2019	6.4	Updated Release
Aug 2020	6.5	Updated Release
Nov 2020	6.6	Updated Release
Jun 2022	7.0	Updated Release

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SECTION

01

MEET ELECTRON

YOUR RIDE TO ORBIT

KEY FEATURES

Electron is an orbital launch vehicle designed specifically to place small satellites of up to 300 kg / 660 lbm into a wide range of low Earth orbits (LEO). Every aspect of Electron has been designed for frequency and reliability to meet the evolving needs of government and commercial small satellite operators.

FLIGHT HERITAGE

Since its first launch in 2017, Electron has become the leading launch vehicle dedicated to small satellites and one of the most frequently launched orbital rockets in the world. More than 50 satellites have been deployed to orbit by Electron for commercial and government partners, including NASA, the U.S. Air Force, DARPA, and the National Reconnaissance Office.

ELECTRON OVERVIEW

Designed, manufactured, and launched by Rocket Lab, Electron is a two-stage launch vehicle powered by liquid oxygen (LOx) and rocket-grade kerosene (RP-1). By incorporating an orbital transfer vehicle stage (Kick Stage) that can deploy multiple payloads to unique orbits on the same mission, Electron can support dedicated missions and rideshare options without the complexity and schedule risk typically associated with launching on medium or heavy lift launch vehicles.

Electron utilizes advanced carbon composite technologies throughout the launch vehicle structures, including all of Electron's propellant tanks. The all carbon-composite construction of Electron decreases mass by as much as 40 percent compared with traditional aluminum launch vehicle structures, resulting in enhanced vehicle performance. Rocket Lab fabricates tanks and other carbon composite structures in-house to improve cost efficiency and drive rapid production.

Electron is powered by the in-house designed and produced additively manufactured Rutherford engines.

Since its first launch in 2017, Rocket Lab has released additional performance from Rocket Lab's Rutherford engines boosting the Electron's total payload lift capacity up to 300 kg / 660 lbm

ELECTRON LAUNCH VEHICLE PARTS

OVERVIEW

LENGTH
18 m

DIAMETER (MAX)
1.2 m

STAGES
2 + Kick Stage

VEHICLE MASS (LIFT-OFF)
13,000 kg

MATERIAL/STRUCTURE
Carbon Fiber Composite/Monocoque

PROPELLANT
LOX/Kerosene

PAYLOAD

NOMINAL PAYLOAD
200 kg / 440 lbm To 500 km SSO

FAIRING DIAMETER
1.2 m

FAIRING HEIGHT
2.5 m

FAIRING SEP SYSTEM
Pneumatic Unlocking, Springs

STAGE 2

PROPULSION
1x Rutherford Vacuum Engine

THRUST
5800 LBF Vacuum

ISP
343 Sec

INTERSTAGE

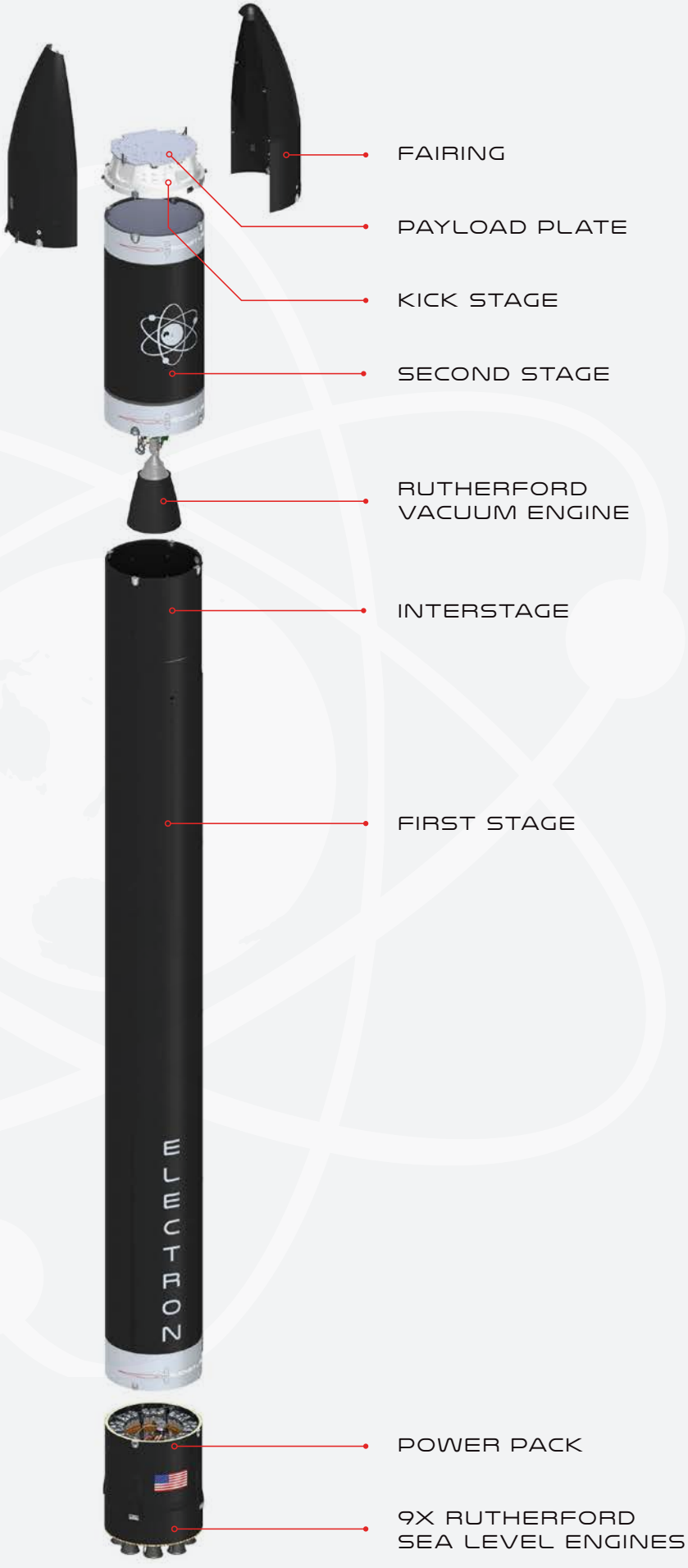
SEPARATION SYSTEM
Pneumatic Pusher

STAGE 1

PROPULSION
9x Rutherford Sea Level Engines

THRUST
5600 LBF Sea Level (Per Engine)

ISP
311 Sec

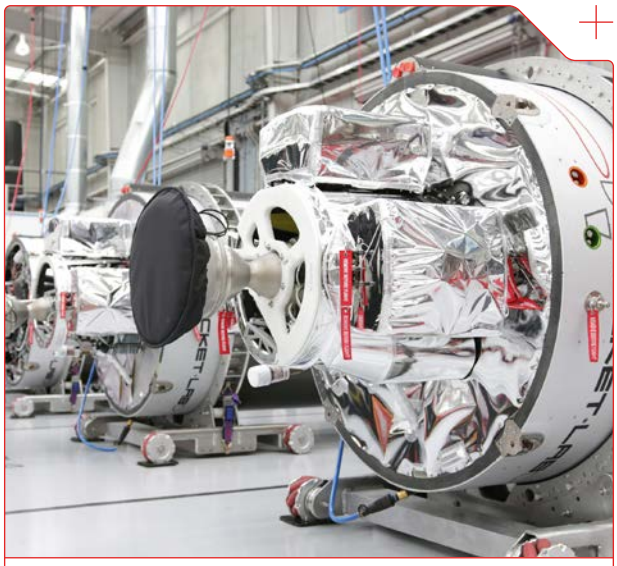


FIRST STAGE

Electron's first stage consists of nine sea-level Rutherford engines, linerless common bulkhead tanks for LOx and RP-1, and an interstage.

Rocket Lab's flagship engine, the 5,600 lbf (24 kN) Rutherford, is an electric pumped LOx/ kerosene engine specifically designed for the Electron launch vehicle. Rutherford adopts an entirely new electric propulsion cycle, making use of brushless DC electric motors and high-performance lithium polymer batteries to drive its propellant pumps. This cuts down on much of the complex turbomachinery typically required for gas generator cycle engines, meaning that the Rutherford is simpler to build than a traditional engine but can achieve 90% efficiency. 130 Rutherford engines have been flown to space on Electron as of July 2020.

Rutherford is also the first oxygen/ hydrocarbon engine to use additive manufacturing for all primary components, including the regeneratively cooled thrust chamber, injector pumps, and main propellant valves. The Stage 1 and Stage 2 Rutherford engines are identical, with the exception of a larger expansion ratio nozzle for Stage 2 for improved performance in near-vacuum-conditions. All aspects of the Rutherford engines are completely designed in-house and are manufactured directly at our Long Beach headquarters in California, USA.



SECOND STAGE

Electron's second stage consists of a single vacuum optimized Rutherford engine, and linerless common bulkhead tanks for LOx and kerosene. With an expanded nozzle, Electron's second stage engine produces a thrust of 5,800 lbf and has a specific impulse of 343 sec.

The 1.2 m diameter second stage has approximately 2,000 kg of propellant on board. The Electron Stage 2 has a burn time of approximately five minutes with a Rutherford vacuum engine as it places the Kick Stage into orbit.

High Voltage Batteries (HVBs) batteries provide power to the LOX and kerosene pumps for the high-pressure combustion while a pressurant system is used to provide enough pump inlet pressure to safely operate. During the second stage burn, two HVBs power the electric pumps until depletion, when a third HVB takes over for the remainder of the second stage burn. Upon depletion, the first two HVBs are jettisoned from Electron to reduce mass and increase performance in flight. The engine thrust is directed with electromechanical thrust vector actuators in two axes. Roll control is provided via a cold gas reaction control system (RCS).

KICK STAGE

Rocket Lab's Kick Stage offers our customers unmatched flexibility for orbital deployment. The Kick Stage is a third stage of the Electron launch vehicle used to circularize and raise orbits to deploy payloads to unique and precise orbital destinations. The Kick Stage is powered by Rocket Lab's in-house designed and built Curie engine.

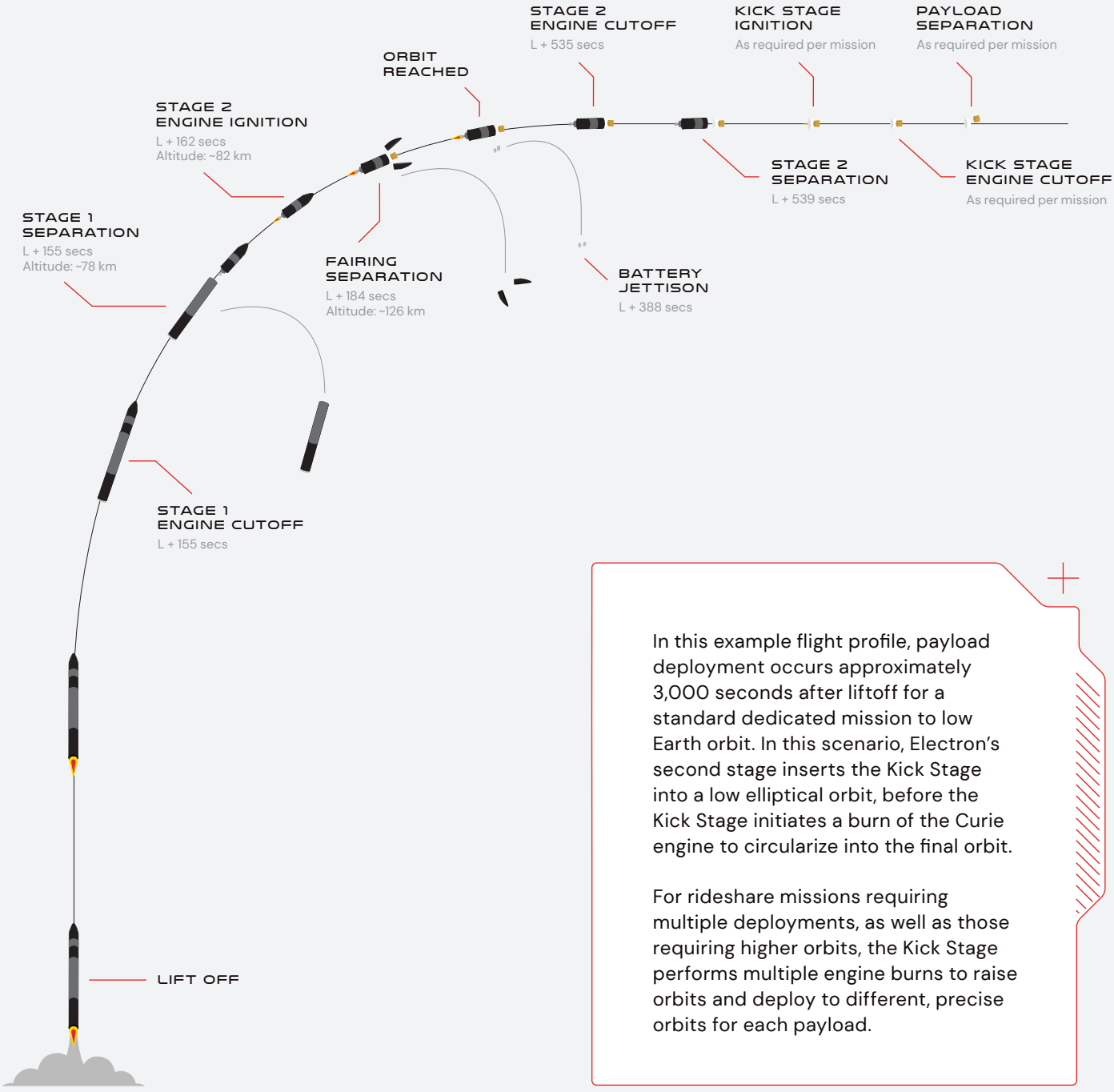
In its simplest form, the Kick Stage serves as in-space propulsion to deploy payloads to orbit. It its most advanced configuration the Kick Stage becomes Photon, Rocket Lab's satellite bus that supports several-year duration missions to LEO, MEO, Lunar, and interplanetary destinations. Comprehensive information about the Kick Stage can be found on page 16.

FAIRING

Electron's payload fairing protects the payload from encapsulation through flight. Electron's payload fairing is a composite split clam shell design and includes environmental control for the payload.

During separation, each half of the fairing is designed to rotate on a hinge away from the payload, resulting in a safe separation motion. Expanded and tailored fairing options are available. Comprehensive information about the fairing can be found on page 22.

EXAMPLE FLIGHT PROFILE



In this example flight profile, payload deployment occurs approximately 3,000 seconds after liftoff for a standard dedicated mission to low Earth orbit. In this scenario, Electron's second stage inserts the Kick Stage into a low elliptical orbit, before the Kick Stage initiates a burn of the Curie engine to circularize into the final orbit.

For rideshare missions requiring multiple deployments, as well as those requiring higher orbits, the Kick Stage performs multiple engine burns to raise orbits and deploy to different, precise orbits for each payload.

SECTION

02

THE KICK STAGE

ROCKET LAB'S RELIABLE, FLIGHT-PROVEN SPACE TUG

SPECIFICATIONS

The Rocket Lab Kick Stage is designed to deliver small satellites to precise and unique orbits, whether flying as dedicated or rideshare on Electron.

The Kick Stage enables missions that require:

- Deployment of payloads at multiple planes/ inclinations, including constellations
- Higher altitude deployment
- Inclinations out of range of the launch vehicle
- Hosted payload support
- Multiple trajectory changes
- Sustained low altitude orbits
- Deorbiting

The Kick Stage is a streamlined path to orbit that eliminates the added risk, complexity, and cost of having to develop your own spacecraft propulsion or using a third-party space tug to deliver your spacecraft to the desired orbit when flying as a rideshare.

PROPULSION

The Kick Stage's propulsion system consists of Rocket Lab's in-house designed and built Curie engine, six low minimum impulse bit cold gas Reaction Control System thrusters, tank pressurization system, and high propellant mass fraction tanks which can be scaled to meet mission-specific needs.

Curie is an additively manufactured, pressure-fed engine with flight heritage across more than a dozen orbital missions. It is a storable, re-startable, bi-propellant liquid propellant engine integrated with lightweight composite propellant tanks and valves into a single compact module.

Curie enables on orbit maneuvering and positioning, plane changes, and deorbit burns.

KICK STAGE SPECIFICATIONS

OVERVIEW

HEIGHT
405 mm

DIAMETER
1.2 m

DRY MASS
40 kg / 88 lbs (dry)

MATERIAL
Carbon composite

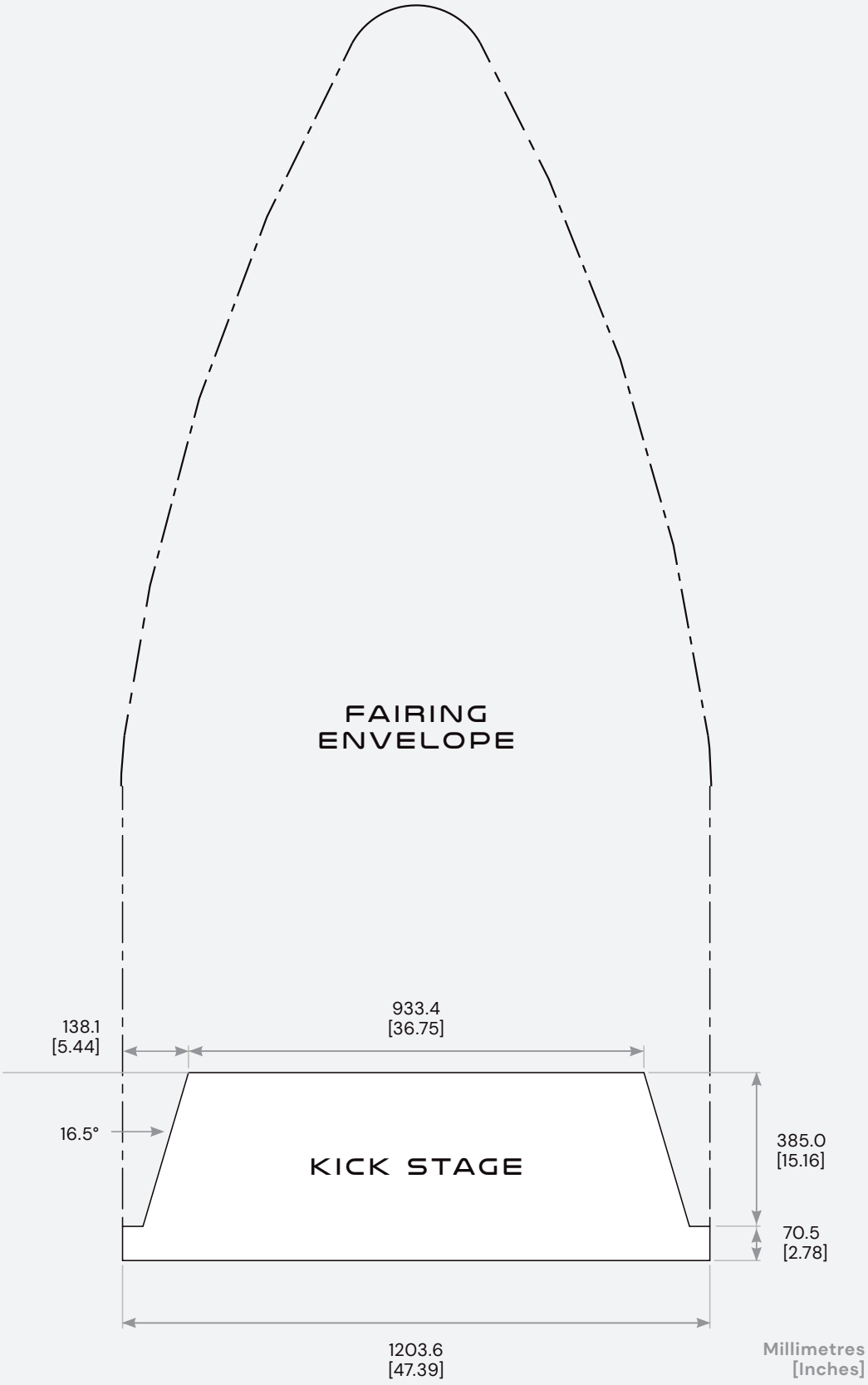
ENGINE
Curie

PROPELLANT
Liquid bi-propellant

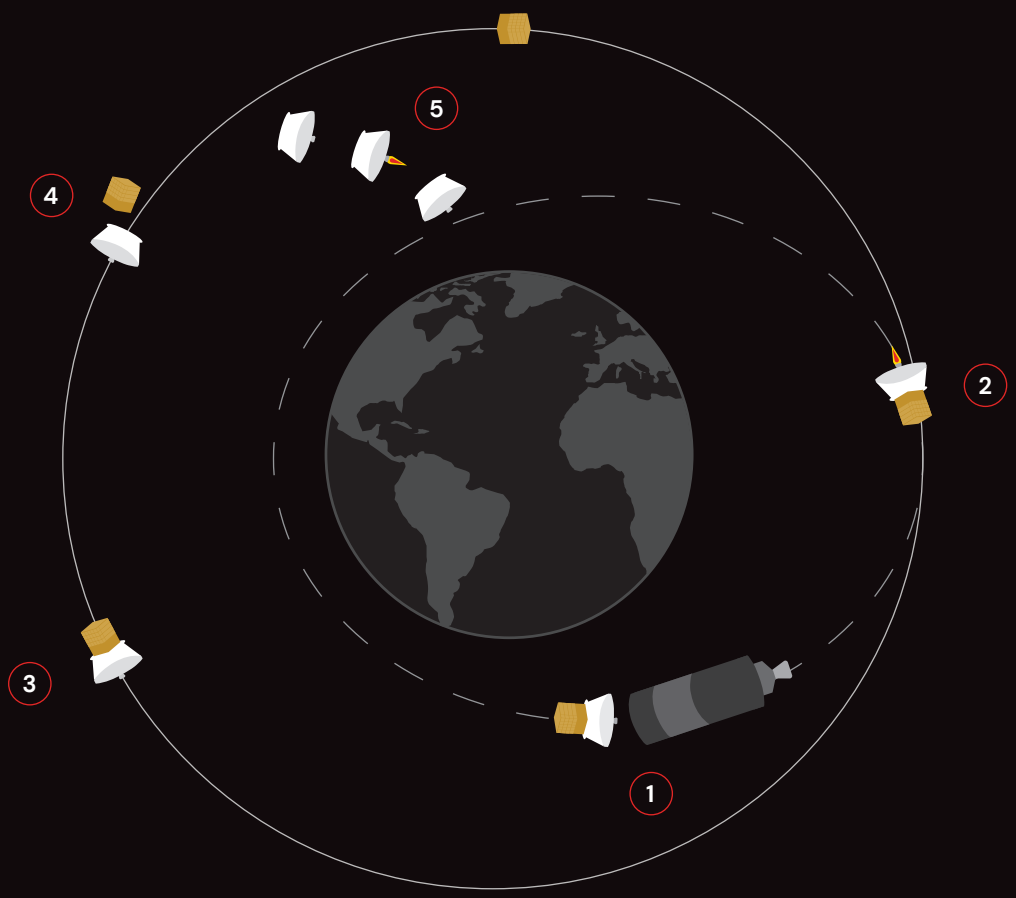
PROPELLANT STORAGE
Carbon composite tanks

NUMBER OF THRUSTER
6 reaction control thrusters (RCS) (2 pods)

THRUST
120 N



ORBIT LOWERING TO ACCELERATE RE-ENTRY



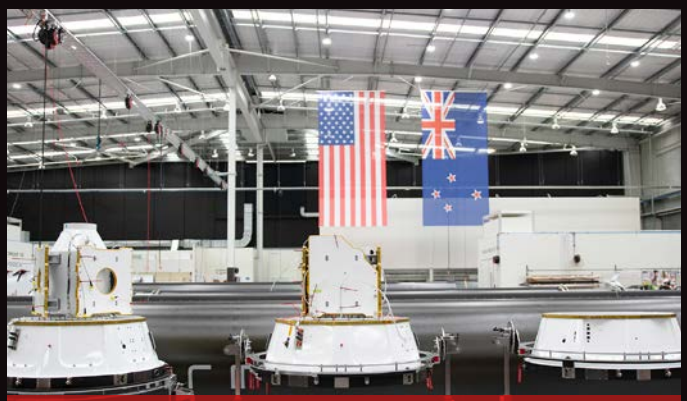
As the small satellite industry experiences rapid growth, Rocket Lab is determined to be part of the solution for sustainability and the reduction of orbital debris in space. Traditional methods of deploying satellites can leave large rocket stages in orbit, contributing to the global issue of space debris.

The Kick Stage has been designed with the capability to deorbit itself on an accelerated time scale, well before the 25 year deorbit guidelines stipulated by NASA. By performing a deorbit burn with the Curie engine, Rocket Lab can lower the Kick Stage's perigee to increase aerodynamic drag on the spacecraft and cause it to deorbit within months or single digit years, as required.

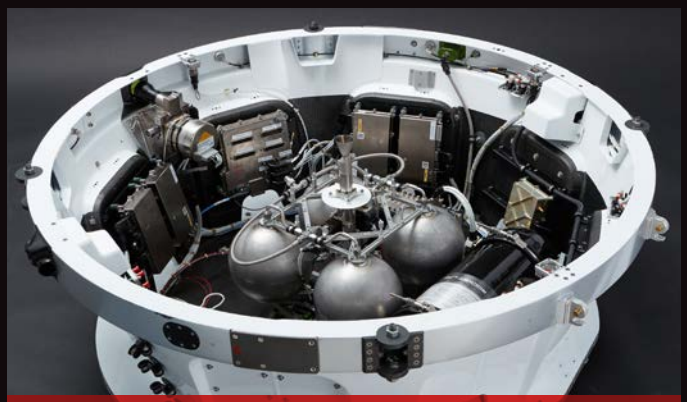
KICK STAGE DEPLOYMENT AND ORBIT LOWERING PROCESS

1. Kick Stage separates from stage two
2. Kick Stage engine ignites to circularize orbit
3. Orbit circularized
4. Payload separation
5. Final engine burn to lower Kick Stage altitude and accelerate deorbiting

F9 'As The Crow Flies' 2019
The Kick Stage in orbit prior to payload deployment



Rocket Lab's Kick Stages for three different missions
Auckland Production Complex, New Zealand



Rocket Lab's Kick Stage (aft view, Kick Stage interior)

MULTIPLE ORBITS, SAME MISSION

The Kick Stage has successfully deployed multiple satellites flying as rideshare payloads to different orbits on the same mission. An example includes Rocket Lab's Electron mission, 'Running Out of Fingers', launched in December 2019. The Kick Stage's Curie engine was ignited to circularize the orbit, before deploying a payload to 400 km. Curie then re-ignited to lower the altitude to 360 km, where the remaining payloads were deployed.

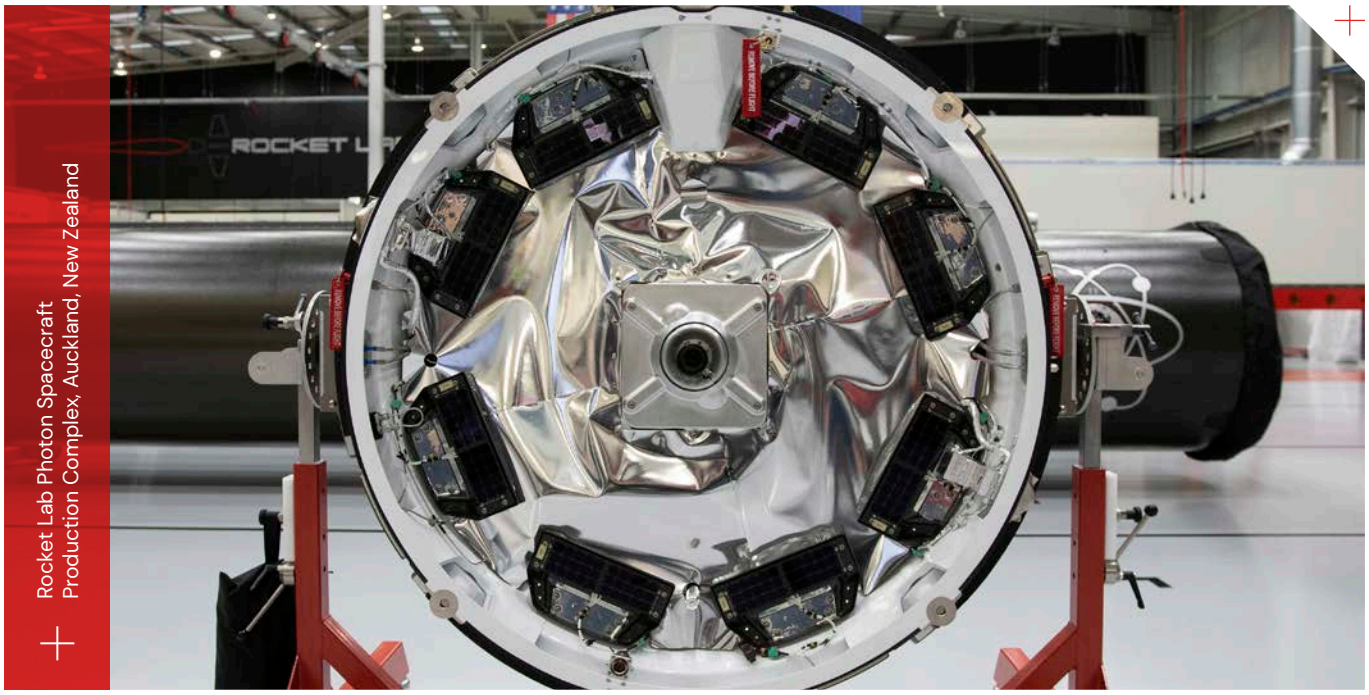
HIGH-ALTITUDE ORBITS AND DE-ORBIT BURNS

The Kick Stage has deployed many satellites to standard 500 km altitudes but is also capable of transferring payloads to much higher altitudes. During Rocket Lab's Electron mission, 'As The Crow Flies', the Kick Stage successfully raised the payload's orbit to 1,200 km, before Curie performed a final burn to lower the stage's perigee by more than 700 km to rapidly accelerate the de-orbit process to avoid the used stage becoming orbital debris.

HOSTED PAYLOADS

The Kick Stage has also functioned as a platform for hosted payloads, as demonstrated during Rocket Lab's third mission, 'It's Business Time,' which launched in November 2018. Following payload deployment of several CubeSats, a drag sail technology demonstrator remained integrated on the Kick Stage to test new materials and technologies designed to enable faster deorbiting of spacecraft once they reach end of life.

EXTENDED MISSIONS



Rocket Lab Photon Spacecraft
Production Complex, Auckland, New Zealand

In its simplest form, the Kick Stage serves as in-space propulsion to deploy payloads to orbit.

For missions that require extended payload support on orbit, or for missions exceeding 2,000 km to MEO, lunar, or interplanetary destinations, Rocket Lab offers the Photon spacecraft bus, a high-performance evolution of the Kick Stage.

Photon is a configurable, modular spacecraft designed to accommodate a variety of payloads and instruments without significant redesign. Photon is equipped with radiation-tolerant avionics, deep space-capable communications and navigation technology, and high-performance space-storable propulsion capable of multiple restarts on orbit. With the capacity to both host an external payload and perform secondary mission objectives as a separate operational spacecraft, Photon has been designed for dedicated mission or as a rideshare option without the programmatic complexity, expanded cost, and schedule risk typically experienced when launching with a medium or heavy lift launch vehicle.

For more comprehensive information about Photon, please contact the team at **launch@rocketlabusa.com**

SECTION

03

PAYLOAD ACCOMMODATION

MAKE YOURSELF AT HOME

THE FAIRING

Electron's payload fairing is a composite split clam shell design and includes environmental control for the payload. During separation, each half of the fairing is designed to rotate on a hinge away from the payload, resulting in a safe separation motion.

OVERVIEW

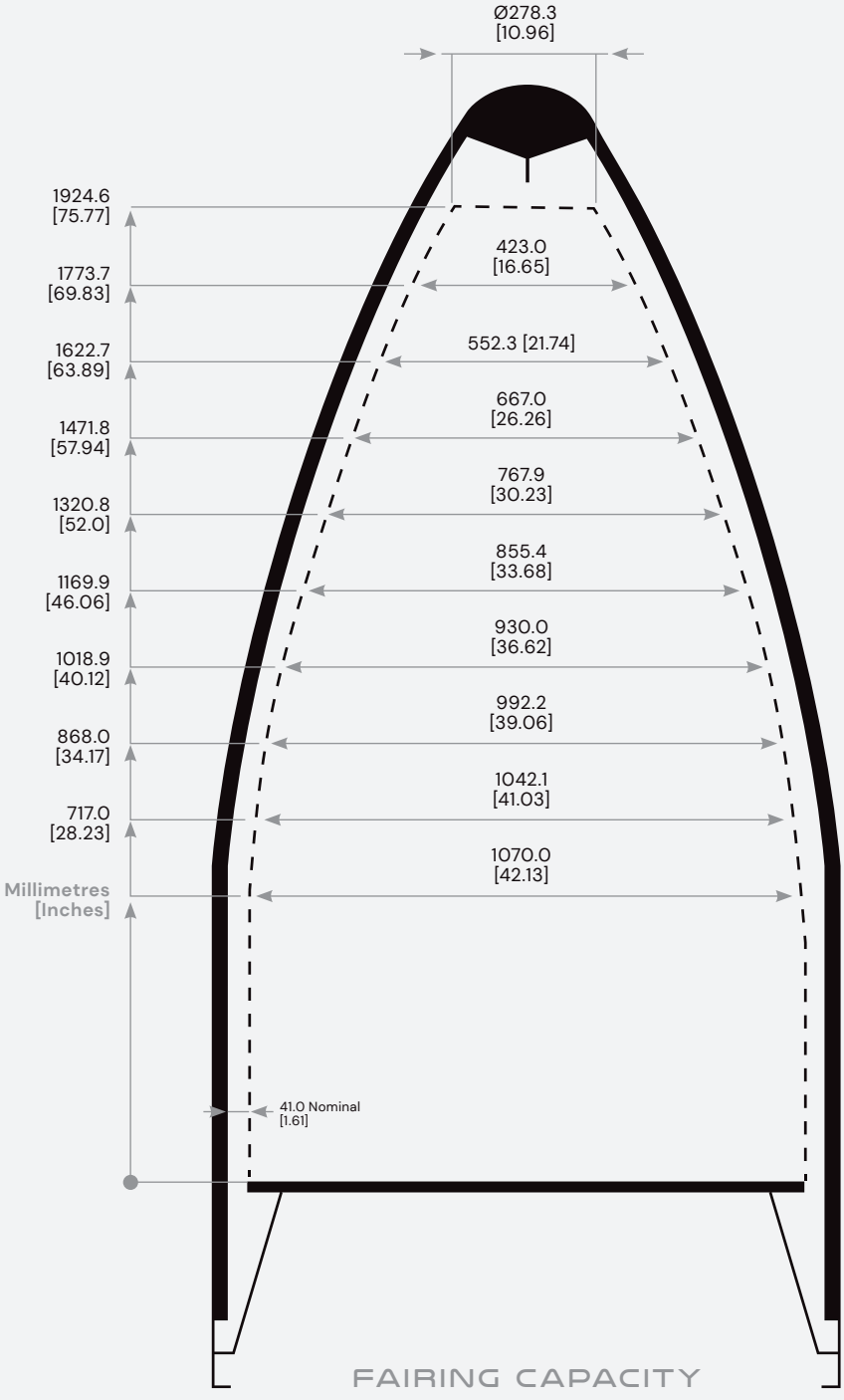
LENGTH
2.5 m

DIAMETER
1.2 m

MASS
44 kg

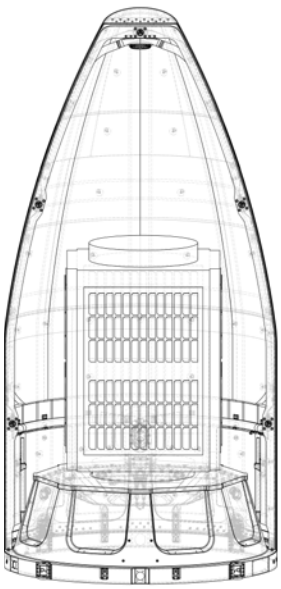
ACOUSTIC PROTECTION
Foam Sheets

SEPARATION SYSTEM
Pneumatic Unlocking, Springs

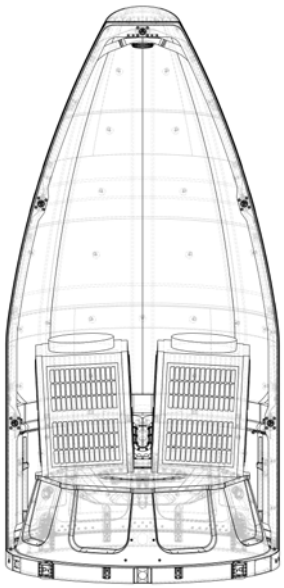


PAYLOAD CONFIGURATIONS

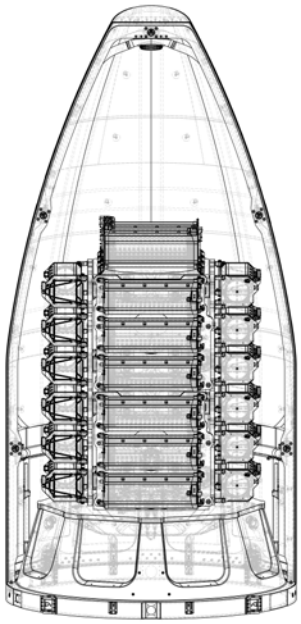
Electron can support a wide range of payload configurations, from a single primary microsatellite, through to multi-satellite missions comprised of several micro and CubeSats. For multi-satellite missions, Rocket Lab offers custom configurations for secondary payload adapters. The following are sample payload configurations.



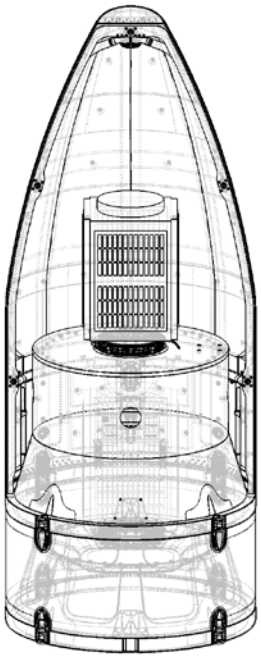
1 Microsat



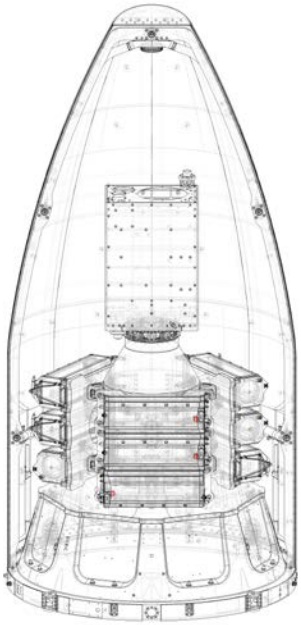
2 Microsats



27 Cubesats



Dual stacked microsats on two Kick Stages



1 Microsat with 9 Cubesats

F5 'DARPA R3D2'
Payload configuration

F13 'Pics Or It Didn't Happen'
Payload configuration

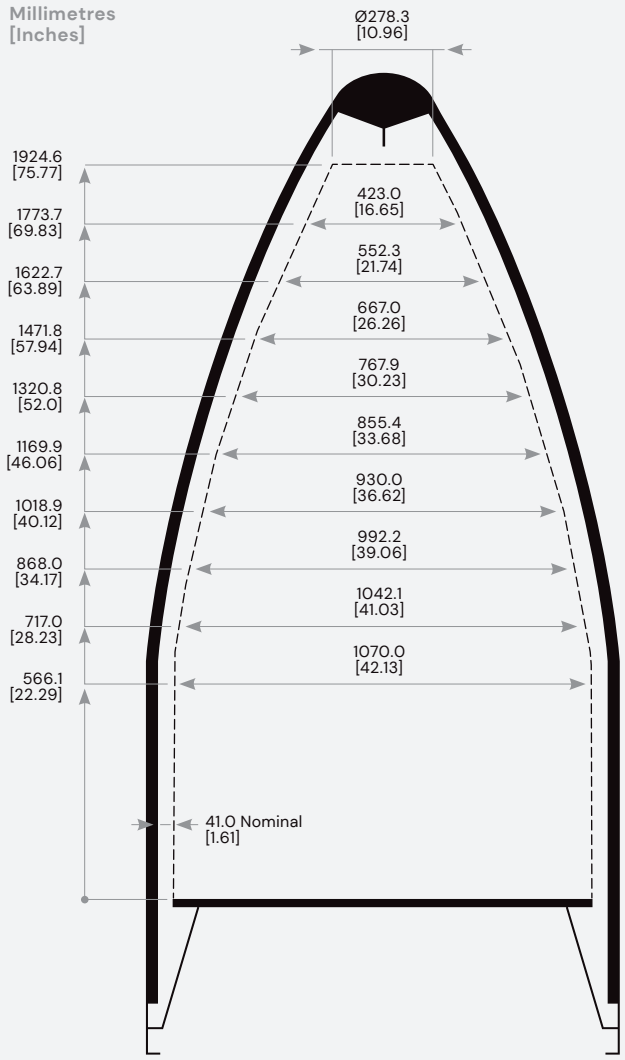
F10 'Running Out Of Fingers'
Payload configuration

EXPANDED FAIRING OPTIONS

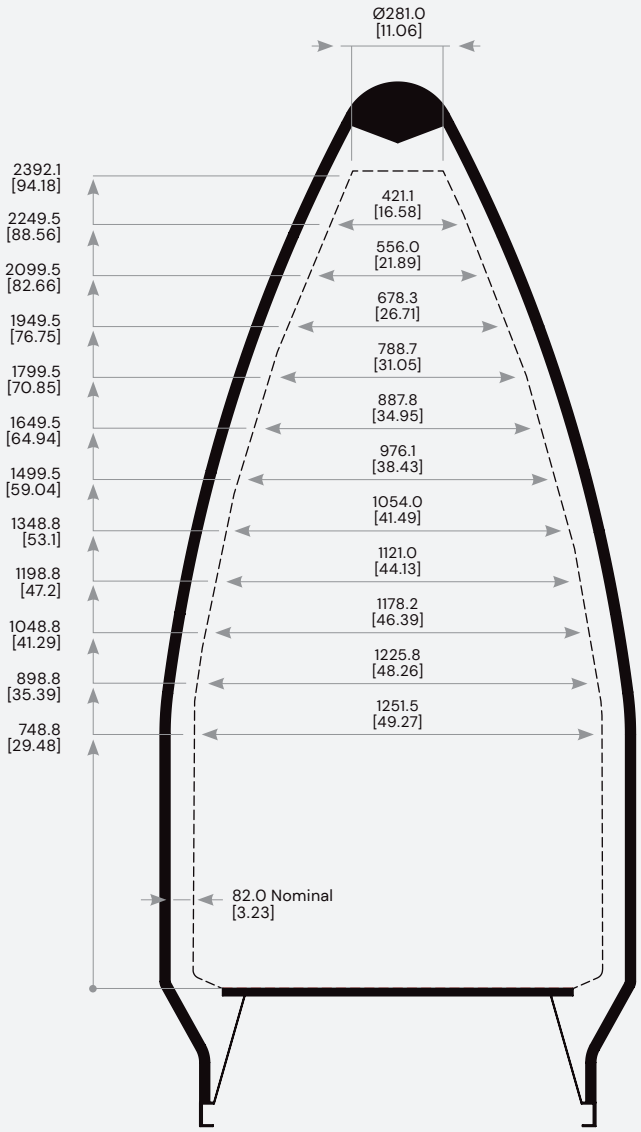
Rocket Lab can develop custom solutions for customers that have payloads exceeding the standard envelope.

To explore an expanded fairing option for your mission, contact the Rocket Lab team at launch@rocketlabusa.com.

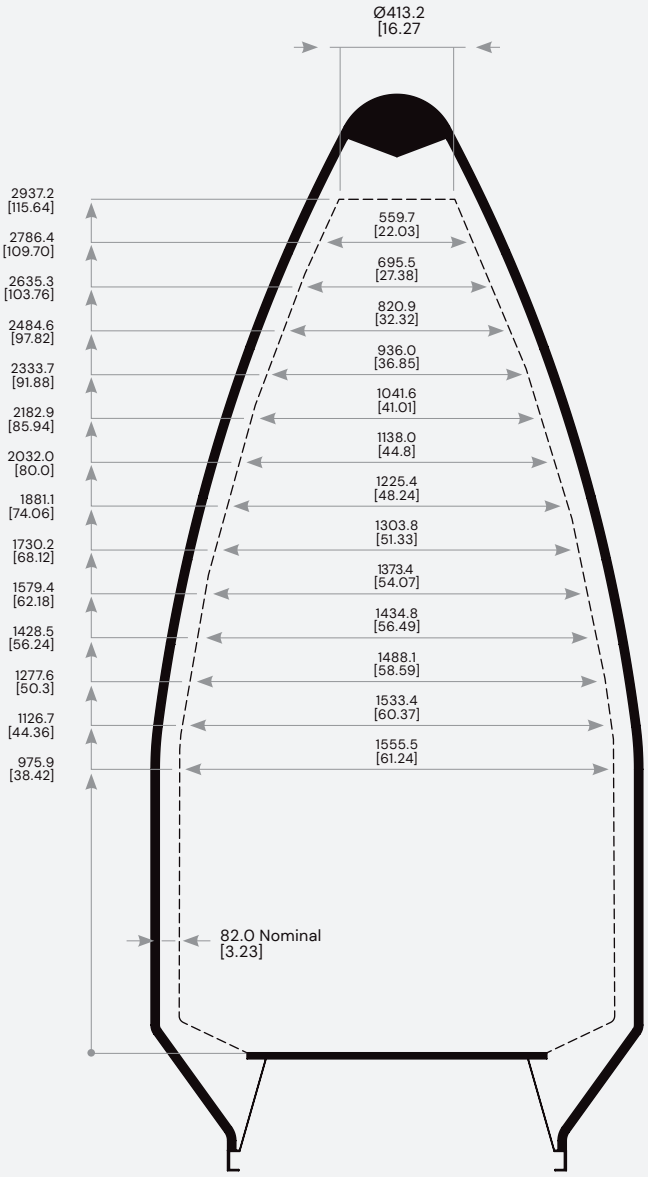
Expanded fairings are a non-standard service.



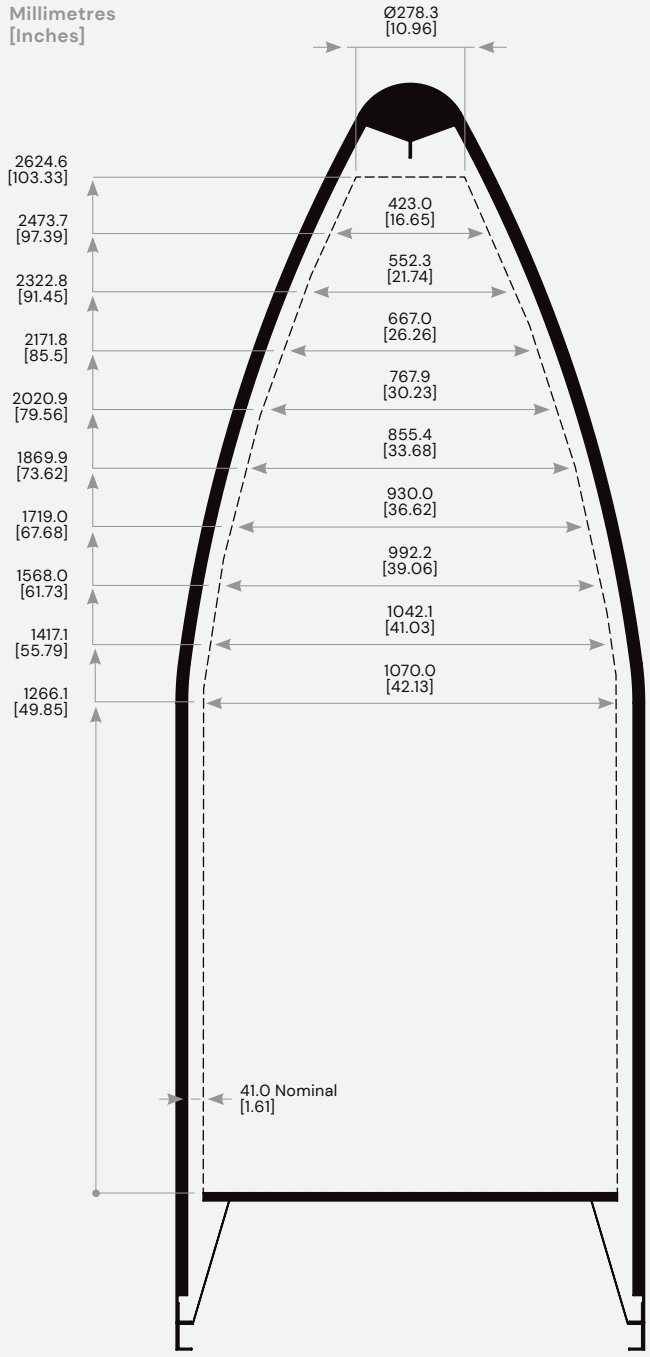
STANDARD FAIRING



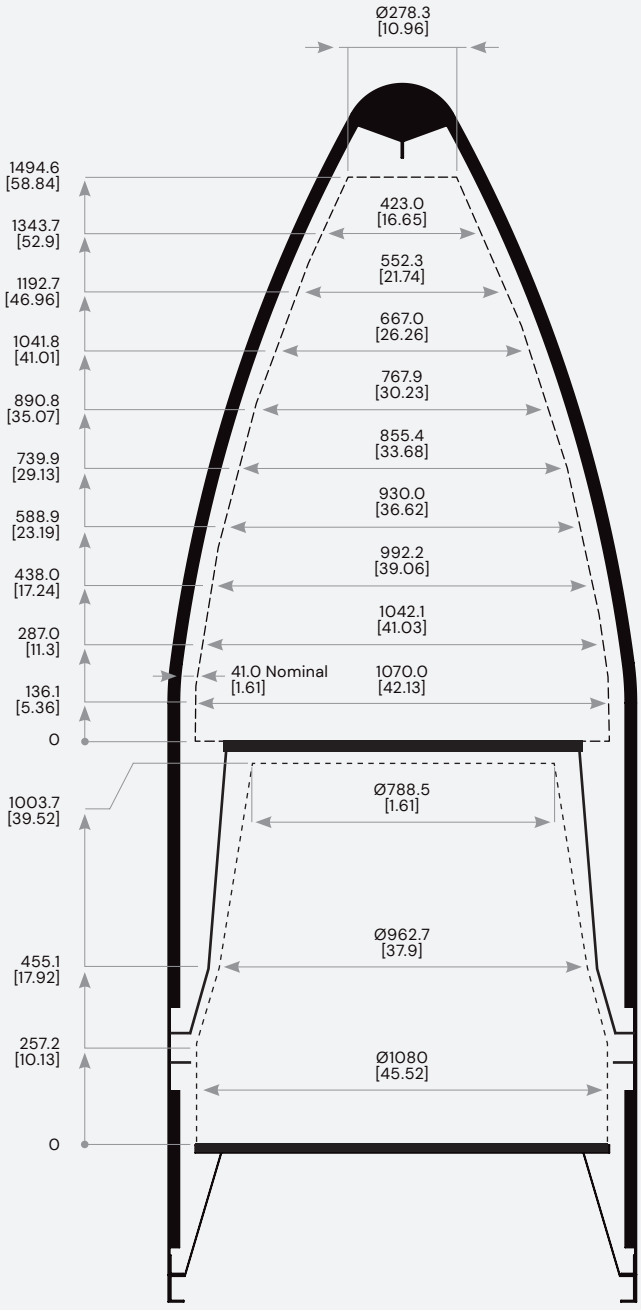
EXPANDED FAIRING
1.2x standard



EXPANDED FAIRING



EXTENDED FAIRING



DUAL STACK FAIRING

PAYLOAD PLATE

Rocket Lab payload plate

F4 'ELaNa-19'
Rocket Lab payload plate, payload configuration

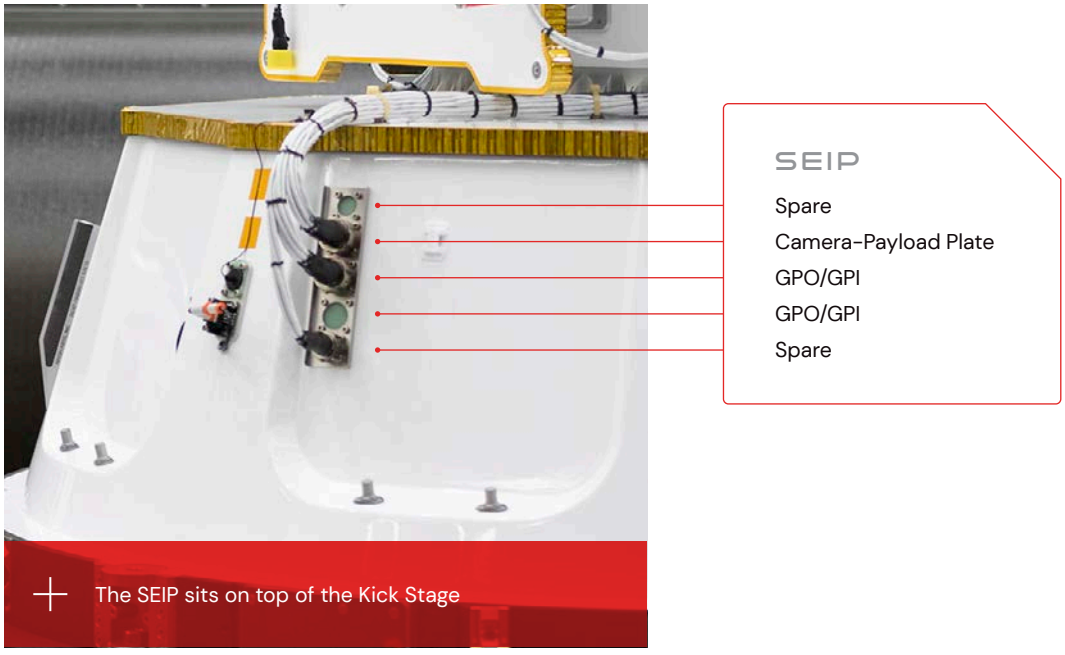
The primary means of attachment between the Electron launch vehicle and the customer payload is via the Payload Plate, which typically forms the direct interface between the spacecraft separation system and the launch vehicle. For rideshare missions, multiple spacecraft separation systems may be mounted directly to the payload plate or Rocket Lab may recommend the use of a multiple payload adapter, to make best use of the available space within the fairing. Customers can provide their own adapters or Rocket Lab can provide one as a non-standard service.

Approximately 1 m in diameter, Rocket Lab's Payload Plate is a honeycomb composite structure which is customized with an interface bolt pattern specifically to match the customer's requirements. Payload Plate configurations can be customized to accept single or multiple satellites, independent of whether they are CubeSat or microsatellite form factors.

PAYLOAD ELECTRICAL INTERFACES

Spacecraft separation initiation signals originate at the Kick Stage. Electron offers a Standard Electrical Interface Panel (SEIP) located on the kick stage for connecting one or more spacecraft separation systems, spacecraft discrete circuits, and umbilical circuits. The nominal configuration of the SEIP includes provisions for four Mightymouse style connectors that can be customized for General Purpose Outputs (GPO), General Purpose Inputs (GPI) and non-standard service umbilical circuits. There are currently 24 GPO output circuits from the Flight Computer dedicated for spacecraft separation deployment, typically implemented in an arrangement of 12 redundant separation commands. GPI Input circuits to the Flight Computer for detecting spacecraft separation and CubeSat door/plunger plate movement can accommodate up to a total of 40 signals. Customers may request any number of circuits on the SV sep connector to be looped back on the LV side for breakwire indication for SV telecommand purposes. For hosted payloads, Electron offers the standard GPO and GPI connections as well as a serial communication for commands and telemetry.

Rocket Lab handles the design, manufacture, and testing of all harnessing leading from the SEIP to the spacecraft separation system or hosted payload. Details of this interface are provided in the mission specific ICD. As a non-standard service, a payload electrical umbilical, available from spacecraft mate to the launch vehicle, through day of launch, is available for customer use. The umbilical provides up to ten twisted shielded pairs with controlled characteristic impedance of 100 ohms for communication purposes, allowing customers to charge batteries and monitor spacecraft during integration and post-encapsulation. If this service is utilized, an electrical ground support equipment interface panel will be accessible in the client room, hangar and in a customer equipment room near the launch pad.



The SEIP sits on top of the Kick Stage

F27 'CAPSTONE™'
Photon Lunar spacecraft being mated to the Electron launch vehicle

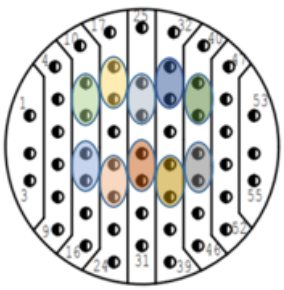
UMBILICAL PINOUT

Vehicle Side

PIN	SIGNAL ID
...	NC
11	22_Pair3+
12	22_Pair3-
13	22_Pair4+
14	22_Pair4-
15	NC
16	NC
17	NC
18	22_Pair5+
19	22_Pair5-
20	NC
21	22_Pair6+
22	22_Pair6-
23	NC
24	NC
25	NC
26	24_ETH_Pair1+
27	24_ETH_Pair1-
28	24_ETH_Pair2+
29	24_ETH_Pair2-
30	NC
31	NC
32	NC
33	22_Pair7+
34	22_Pair7-
35	NC
36	22_Pair8+
37	22_Pair8-
38	NC
39	NC
40	NC
41	22_Pair9+
42	22_Pair9-
43	22_Pair10+
44	22_Pair10-
...	NC

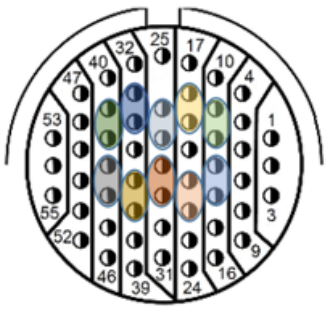
Where the client connects

Connector P/N :
D38999/20FE35PN



Where the PL harness connects

Connector P/N :
D38999/26FE35SN



Front View

Ground Side

PIN	SIGNAL ID
...	NC
11	22_Pair3+
12	22_Pair3-
13	22_Pair4+
14	22_Pair4-
15	NC
16	NC
17	NC
18	22_Pair5+
19	22_Pair5-
20	NC
21	22_Pair6+
22	22_Pair6-
23	NC
24	NC
25	NC
26	24_ETH_Pair1+
27	24_ETH_Pair1-
28	24_ETH_Pair2+
29	24_ETH_Pair2-
30	NC
31	NC
32	NC
33	22_Pair7+
34	22_Pair7-
35	NC
36	22_Pair8+
37	22_Pair8-
38	NC
39	NC
40	NC
41	22_Pair9+
42	22_Pair9-
43	22_Pair10+
44	22_Pair10-
...	NC

SEPARATION SYSTEMS

Rocket Lab's Maxwell Satellite Dispenser on Flight 13

PSC's Motorized Light Band (MLB) separation system

For CubeSat customers, Electron has been designed to support all commercially available payload separation systems, both mechanically and electrically. Electron has the added capability to deploy multiple separation systems during a single mission, enabling rideshare missions without additional sequencer hardware. Rocket Lab can procure the separation system on a customer's behalf, integrate a customer supplied system, or supply a Rocket Lab-developed separation system – such as our Maxwell series of CubeSat dispensers.

For microsatellites customers Electron is designed to support the RUAG Clamp-band, Planetary Systems Corp Motorized Light-band and 4-point Hold Down separation systems. Please contact Rocket Lab for compatibility of other separation systems.

Rocket Lab has worked with RUAG to offer the PAS 381S separation system. The PAS 381S is perfectly sized for Electron-class dedicated payloads and is cross compatible with the standard 15" ESPA interface that many small satellites have been designed to. The PAS 381S can be configured for flight in advance of the spacecraft arrival at the launch site, so all that remains is the installation of bolts at the mechanical interface and any required electrical connections or hookups. The RUAG PAS 381S for Electron has also been designed to accommodate a fly-away electrical umbilical interface, for those customers who require power or connectivity during post-encapsulation and on-pad operations.

Rocket Lab has worked with Planetary Systems Corp (PSC) to offer multiple Motorized Light-Band (MLB) diameters specifically suited to the footprint of the spacecraft. The MLBs that are compatible with the Electron mechanical interface are 8" through 24" diameters. The MLB integration at the launch site utilizes Rocket Lab or customer provided standard electrical test hardware compatible with all MLBs and the PSC CSD CubeSat dispenser available from PSC. The MLBs for Electron have also been designed to accommodate a fly-away electrical umbilical interface, for those customers who require power or connectivity during post-encapsulation and on-pad operations.

ADVANCED LIGHTBAND

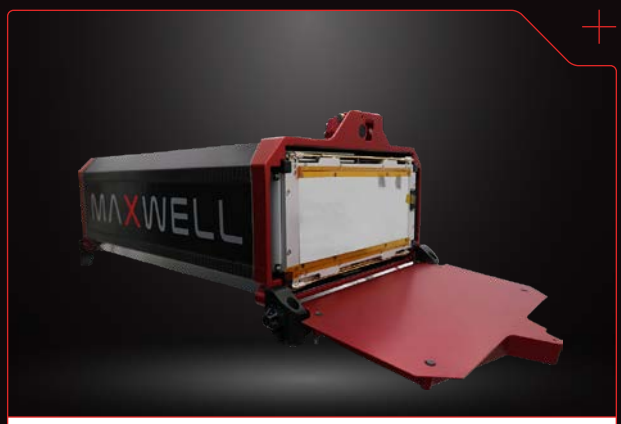
- 8 to 24 inch bolt circle diameters
- Easy to use – Integrate in under 30 mins
- Thousands of tests prove reliability
- Stiffer and stronger
- Integrated Separation Springs, Switches and Connectors
- No consumables, not pyrotechnic
- Separation tests can be repeated in minutes

MARK II MOTORIZED LIGHTBAND

- 8 to 38 inch bolt circle diameters
- Non-pyrotechnic separation system
- TRL-9, over 45 lightbands flown
- 100% success on orbit
- Lowest overall cost
- No consumables to operate

CANISTERIZED SATELLITE DISPENSER

- Non-pyrotechnic satellite dispenser
- Sizes: 3U, 6U, 12U
- Fully preloaded payload
- Lowest overall cost
- TRL-9, flight heritage achieved
- 2kg per U mass capability



MAXWELL SATELLITE DISPENSER

- Lightest CubeSat dispenser in its class
- Unique carbon fibre structure
- Dual separation switches and one-way clutch bearing, in-door hinge to restrict door bounce back
- Low spin-rate and reliable deployment
- Non-explosive lock and redundant dual door release mechanism to ensure accurate moment of deployment

SECTION

04

PERFORMANCE OVERVIEW

ELEGANT DESIGN, EXCEPTIONAL PERFORMANCE

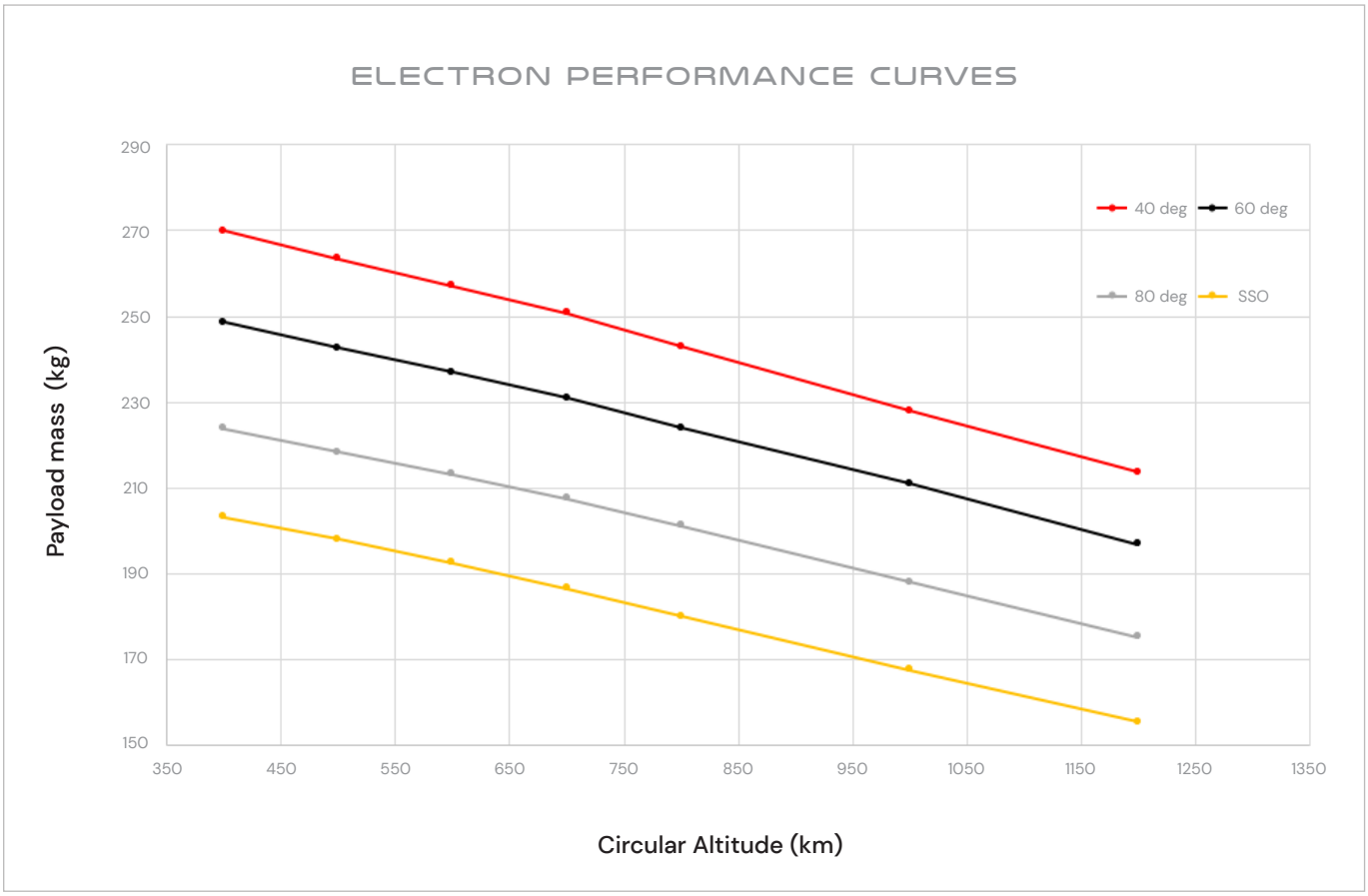
ELECTRON VEHICLE PERFORMANCE

Electron is designed to place payloads of up to 200 kg into a circular SSO at 500 km altitude, however we can accommodate a wide range of different payload and orbit requirements. One of the most common orbits requested by customers is a Sun-synchronous orbit (SSO), shown in the graph below.

Rocket Lab operates two launch sites; Launch Complex 1 on New Zealand's Māhia Peninsula, and Launch Complex 2 within the Mid-Atlantic Regional Spaceport at the NASA Wallops Flight Facility in Virginia.

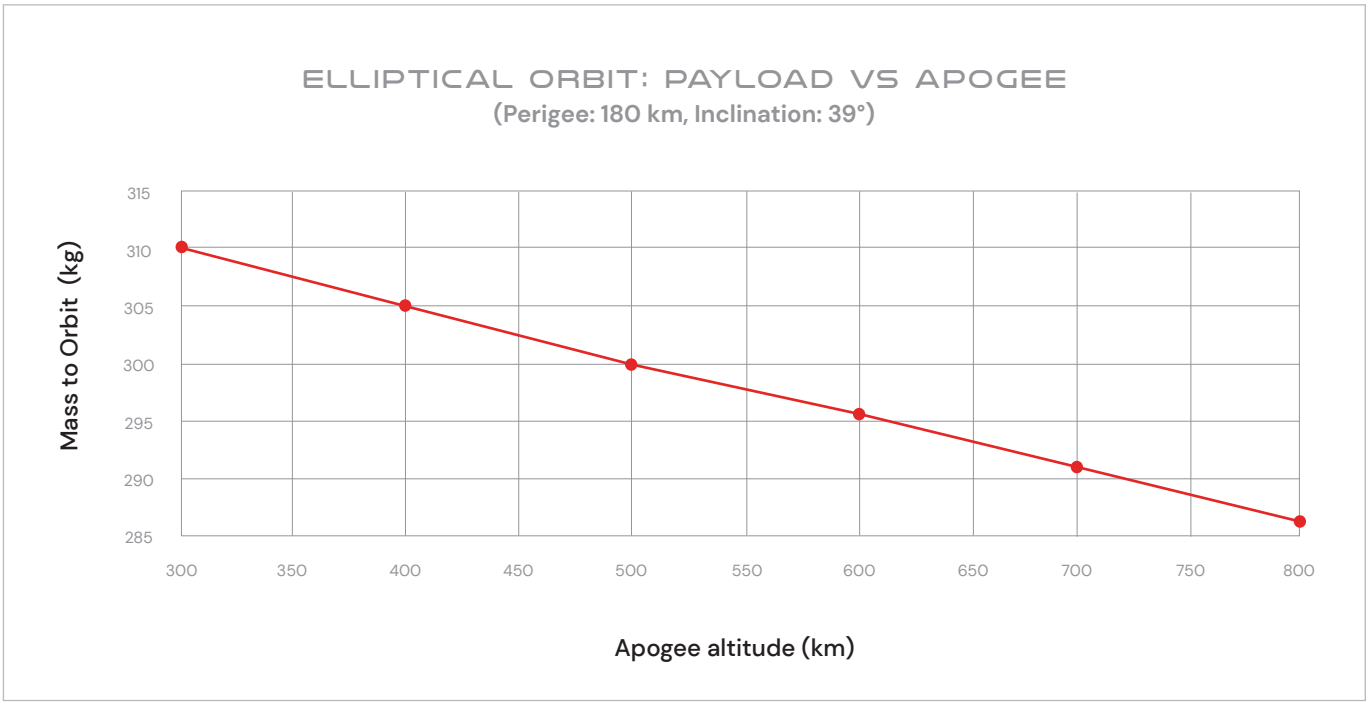
From Launch Complex 1, Electron can be flown on trajectories of inclinations ranging from 39 degrees to 120 degrees. Additional inclinations outside of this range may also be possible upon request.

From Launch Complex 2, Electron can be flown on trajectories of inclinations ranging from 38 degrees to 60 degrees. Additional inclinations outside of this range may also be possible upon request.



NON-TRADITIONAL ORBITS

For customers seeking non-traditional orbits, the graph below represents the maximum performance for an elliptical orbit launched due east from the Mahia launch site.



ORBIT INJECTION ACCURACY

Electron can achieve the following target mission injection accuracies for a typical mission to 500 km SSO, as shown in Table 3. Note that mission-specific payload injection accuracies will be calculated as part of mission analysis at Rocket Lab.

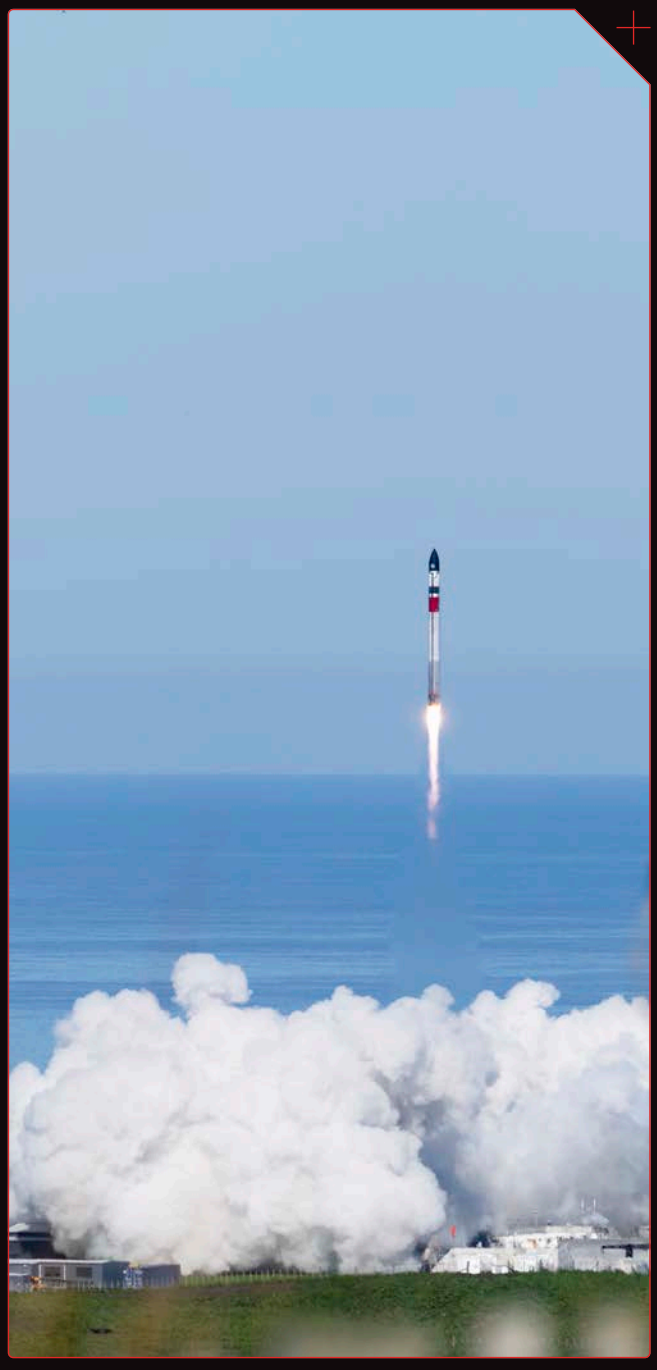
Inclinations	+/- 0.15 deg
Perigee	+/- 15 km
Apogee	+/- 15 km

ATTITUDE & DEPLOYMENT RATES

Electron can achieve the following target mission injection accuracies for a typical mission to 500 km SSO, as shown in the table. Note that mission-specific payload injection accuracies will be calculated as part of mission analysis at Rocket Lab.

The onboard cold gas thruster attitude reaction control system (RCS) of the Kick Stage will provide the capability to hold a nominal attitude prior to separation of the payload, resulting in low deployment attitude and rate margins. Mission-specific values will be provided by Rocket Lab.

Attitude	+/- 5 deg
Rates	+/- 1.5 deg/s



SECTION

05

AVIONICS

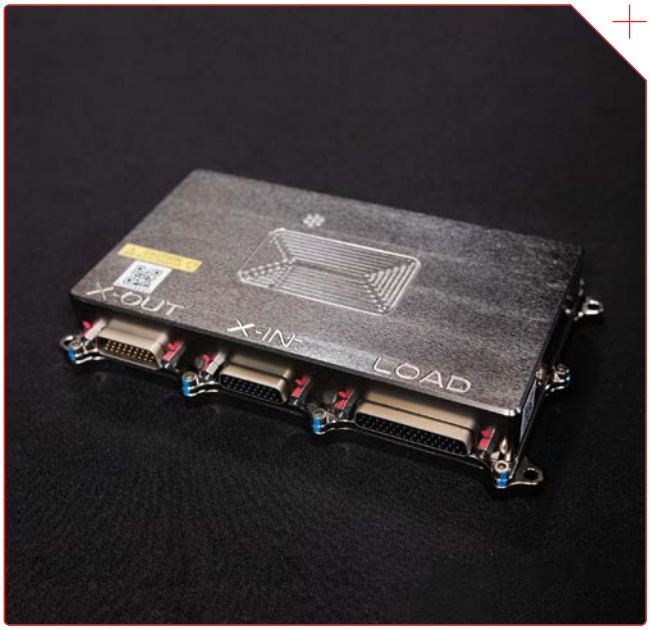
HIGH-PERFORMANCE FLIGHT COMPUTER SYSTEMS

HIGH-PERFORMANCE FLIGHT COMPUTER SYSTEMS

Rocket Lab has designed high-performing avionics and flight computer systems, including in-house assembly and testing. The computing nodes make use of state-of-the-art Field Programmable Gate Array (FPGA) architecture, allowing massive customization of function while retaining hardware commonality.

Rocket Lab performs avionics validation not only at the component level, but also in our sophisticated hardware-in-the-loop (HITL) test facility which allows for integrated launch vehicle and software simulation and testing.

The Electron launch vehicle is equipped with a proven, Federal Aviation Authority (FAA) certified autonomous flight termination system which has been in use on Electron since 2019. The system safely terminates the flight of the vehicle automatically if mission rules are violated.



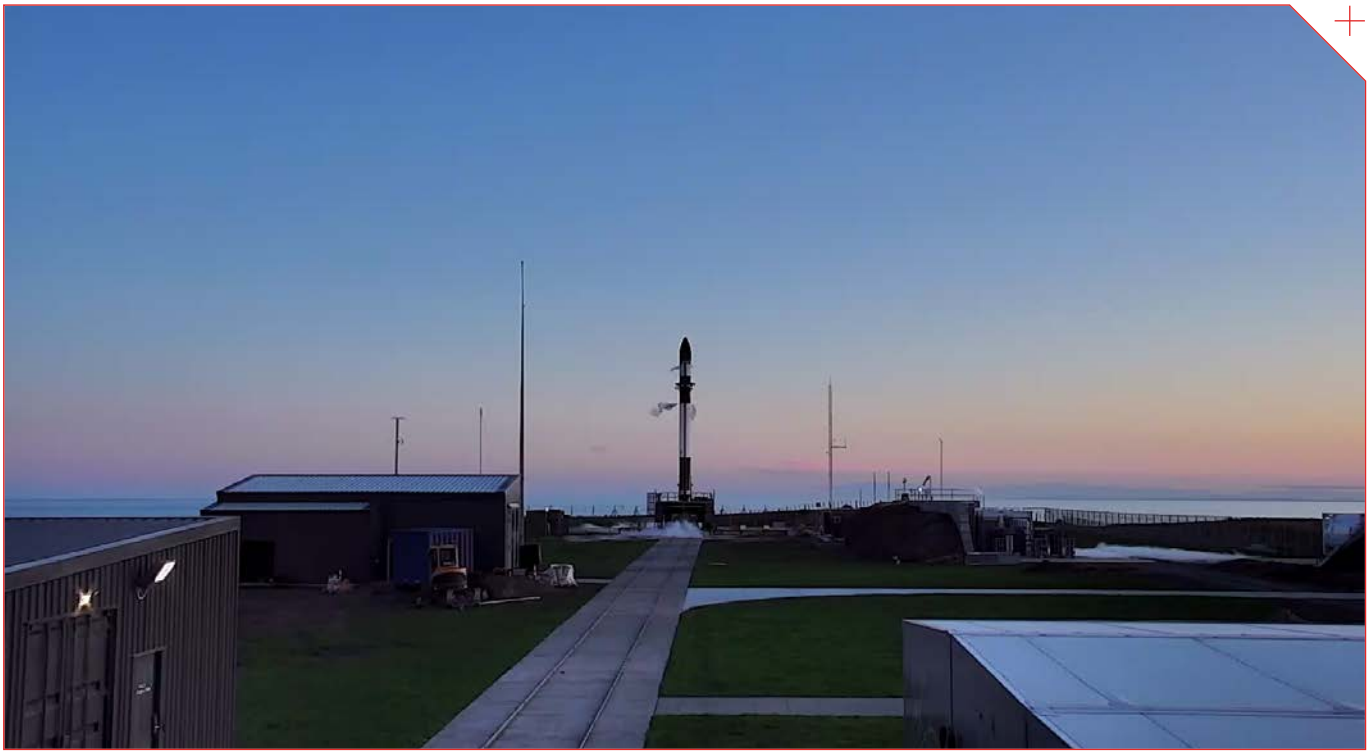
SECTION

06

FLIGHT ENVIRONMENTS

THE SMOOTHEST RIDE TO ORBIT

THE SMOOTHEST RIDE TO ORBIT



Electron's payload environments provide the most secure and smooth ascent to orbit on the market.

Rocket Lab can perform a mission specific Coupled Loads Analysis (CLA) as part of the launch service statement of work on request, including incorporating data from previous flights to further refine launch environments. The loads and environments provided in this section are for reference only – final mission environments are provided to customers via the mission specific interface control document (ICD). The environments represent the flight level maximum predicted environment (MPE) at the top of the payload plate and do not include any additional margin for testing of spacecraft. Rocket Lab recommends customers follow the guidelines in GSFC-STD-7000 for spacecraft testing margins.

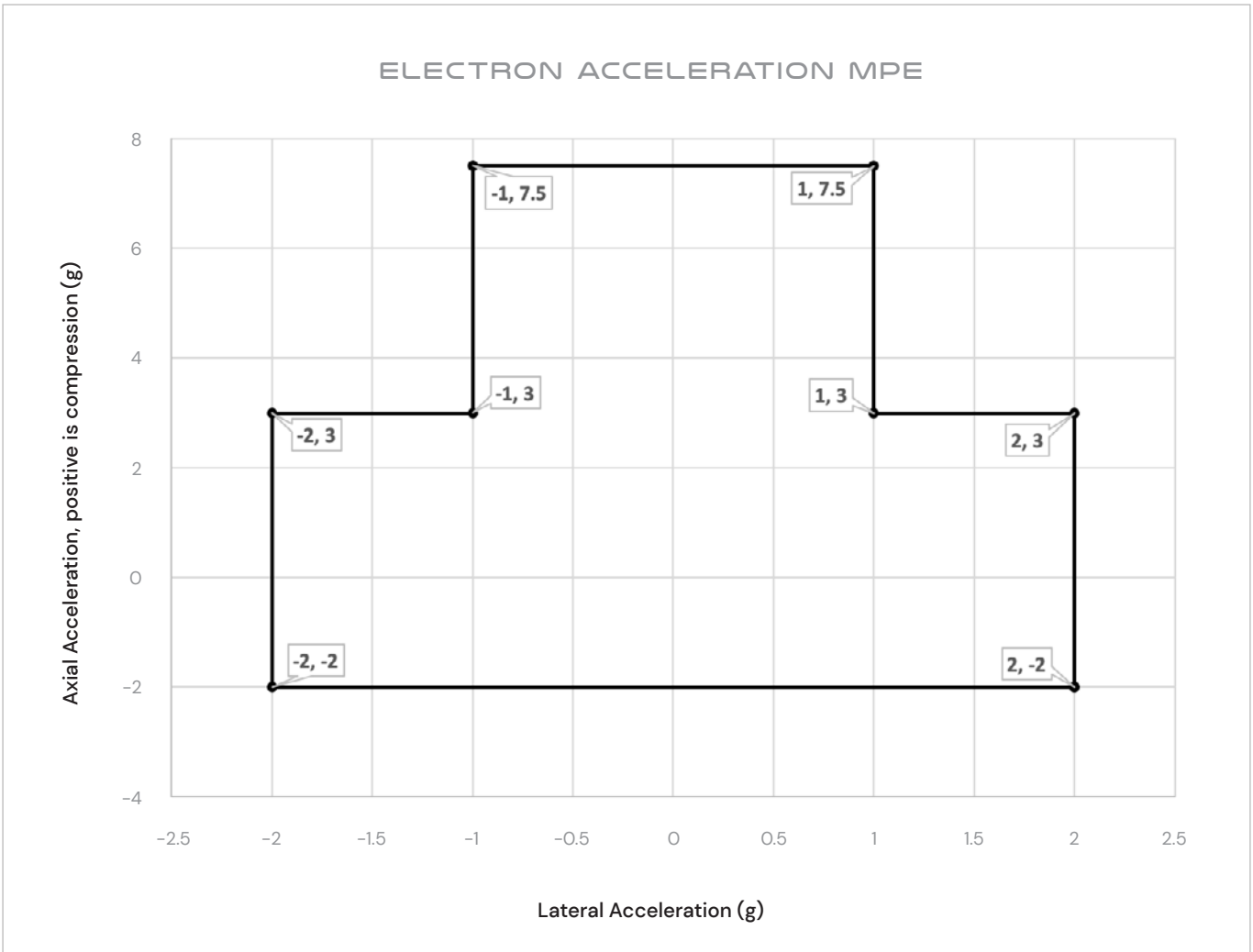
FAIRING THERMAL & HUMIDITY ENVIRONMENT

The fairing environment is controlled from encapsulation through deployment, with a maximum relative humidity of 65%. A standard mission will experience free molecular heating around 1135 W/m^2 at fairing deployment.

Rocket Lab can perform a mission specific thermal analysis encompassing events from roll-out to orbital deployment on request.

ACCELERATION LOADS

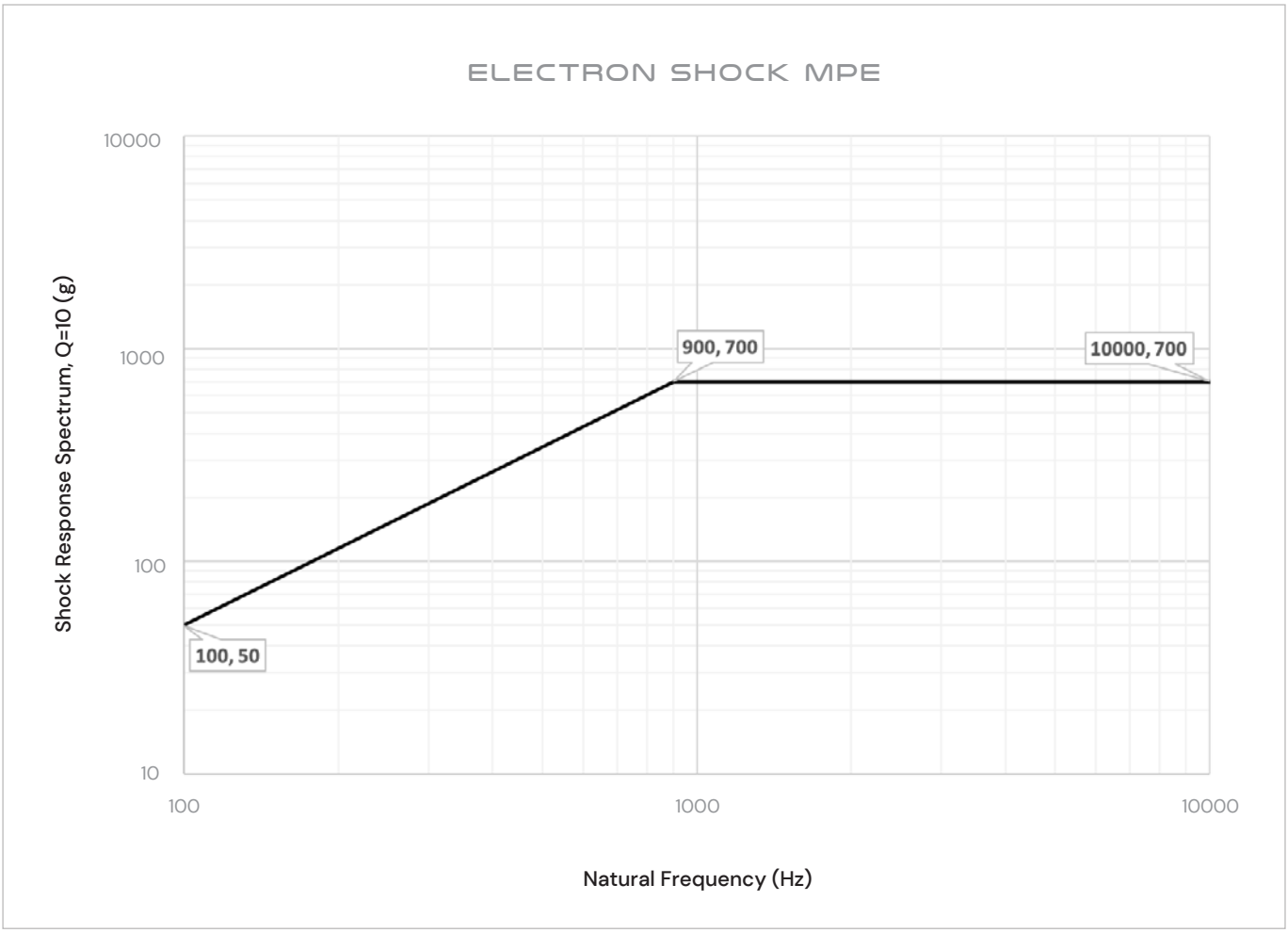
The payload will be subjected to a range of axial and lateral accelerations during flight. The maximum predicted load factors will typically be within the envelope shown in the Figure below. This envelopes both static and dynamic loads. Mission specific accelerations will be determined via coupled loads analysis and provided in the mission ICD.



SHOCK

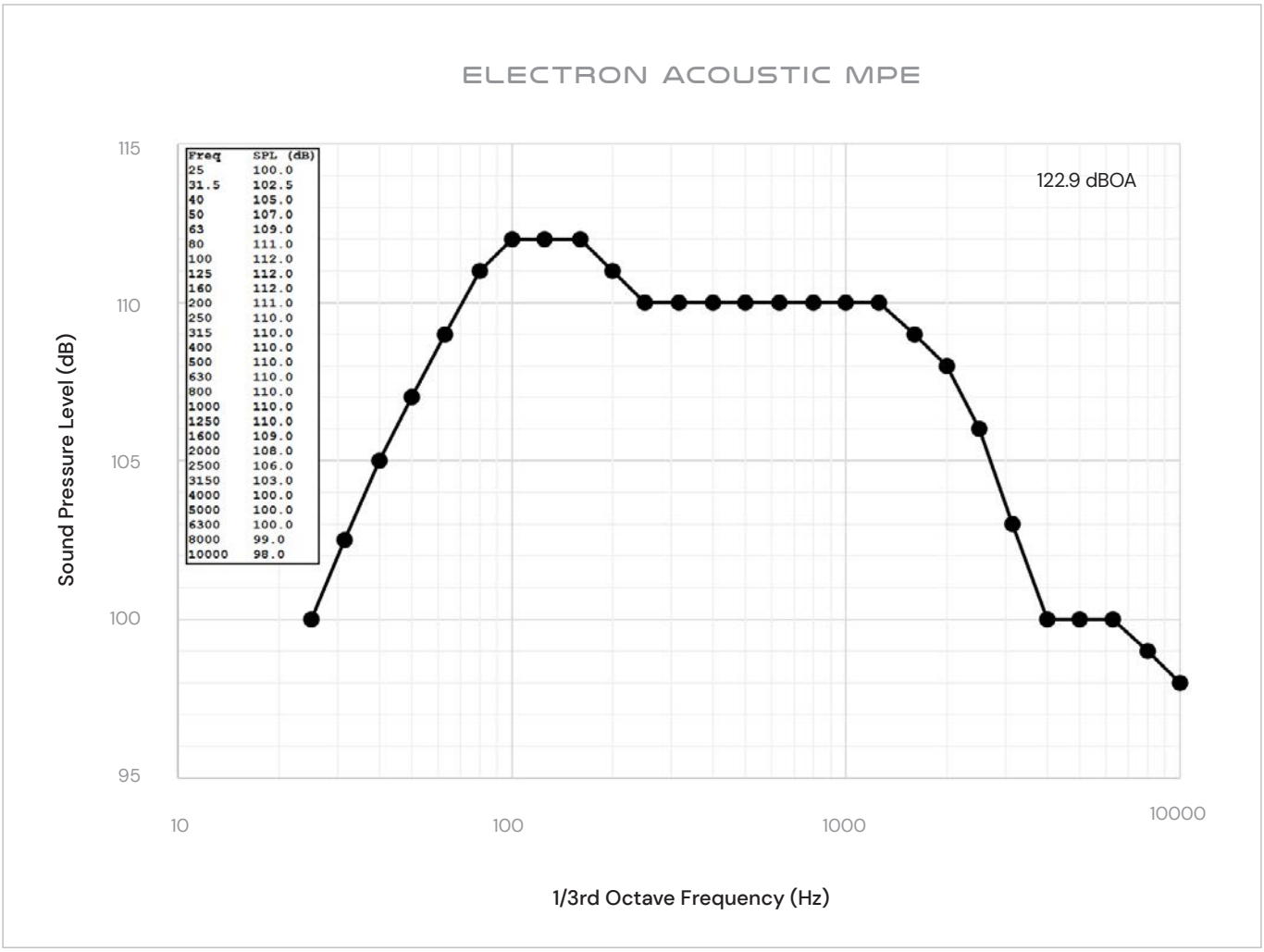
The maximum predicted shock response at the Payload Plate from all sources of launch vehicle shock is shown in the graph and table.

FREQUENCY (HZ)	SRS ACCELERATION
100	50
900	700
10,000	700



ACOUSTICS

The maximum predicted acoustic environment within the Payload Fairing will be at or below the levels shown in the graph below.



RADIO FREQUENCY

ELECTRON RADIATED EMISSIONS

Electron radiates radio frequency emissions that come from omni-directional antennas mounted around the ring of the Kick Stage and from the body of the lower stages. Payloads can expect to experience an electric field from these emissions no worse than the levels in the table below.

LAUNCH SITE	FREQUENCY BAND (MHZ)	ELECTRON ANTENNA TO MOUNTED PAYLOAD (MM)	E-FIELD DURING LAUNCH (V/M)
LC-1	2200 — 2290	350	15.6
LC-2	2200 — 2290	350	15.6

ELECTRON OPERATIONAL FREQUENCIES

Electron operates within in a few frequency bands, but may only use a subset of those frequency bands for Telemetry, Tracking and Command. These frequency bands can be found in the table below. Some frequency adjustments can be made within these bands to accomplish inter-compatibility if required.

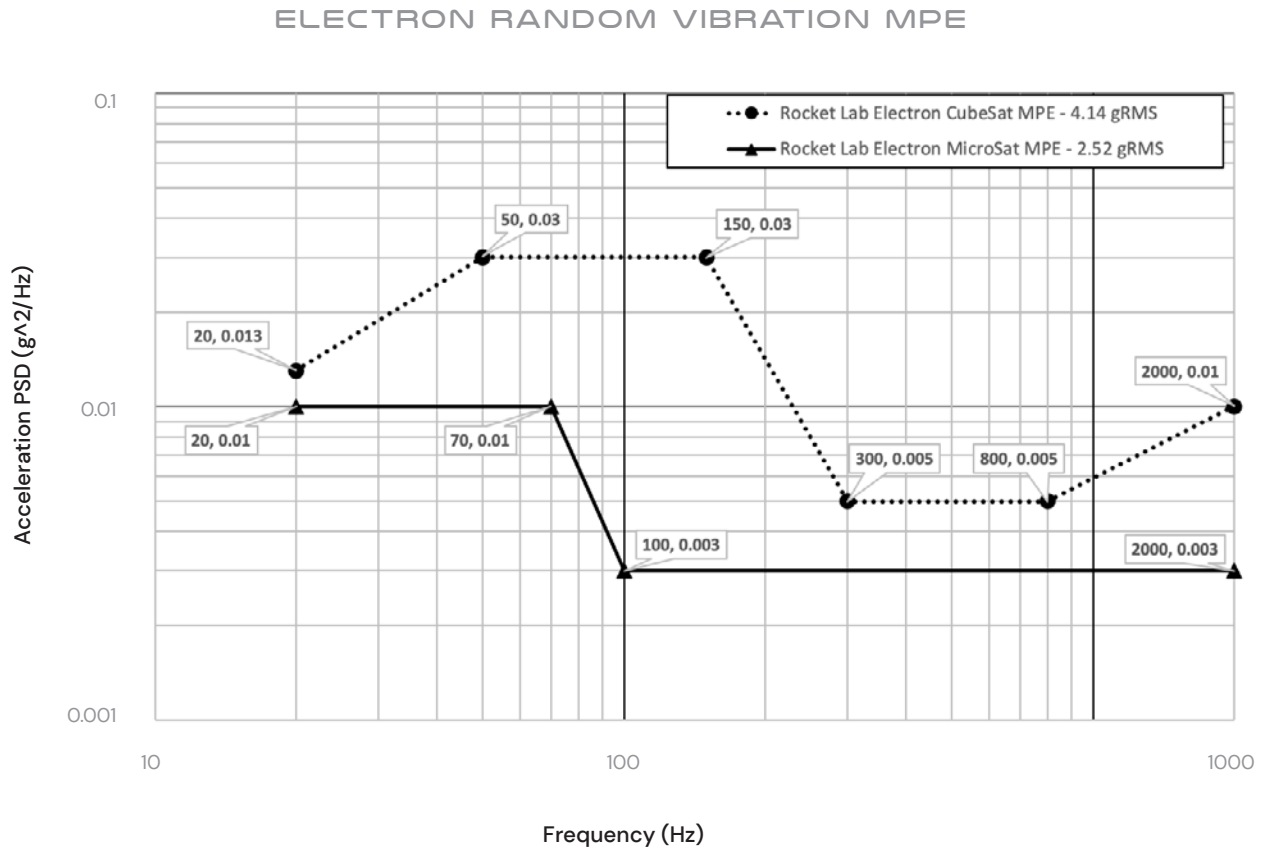
SOURCE	BAND	MODE	FREQUENCY BAND (MHZ)
GPS L1	L-Band	R	1565 — 1585
S-Band Telemetry	S-Band	T	2200 — 2290
S-Band Command	S-Band	R	2025 — 2110

RANDOM VIBRATION

The curves below specify the Maximum Predicted Random Vibration Environment for CubeSat and MicroSat class payloads integrated to the Electron launch vehicle. The levels combine predicted environments and flight data, and are supplied at the spacecraft interface. Customer specific test levels and notching strategies will be reviewed by Rocket Lab on a mission specific basis.

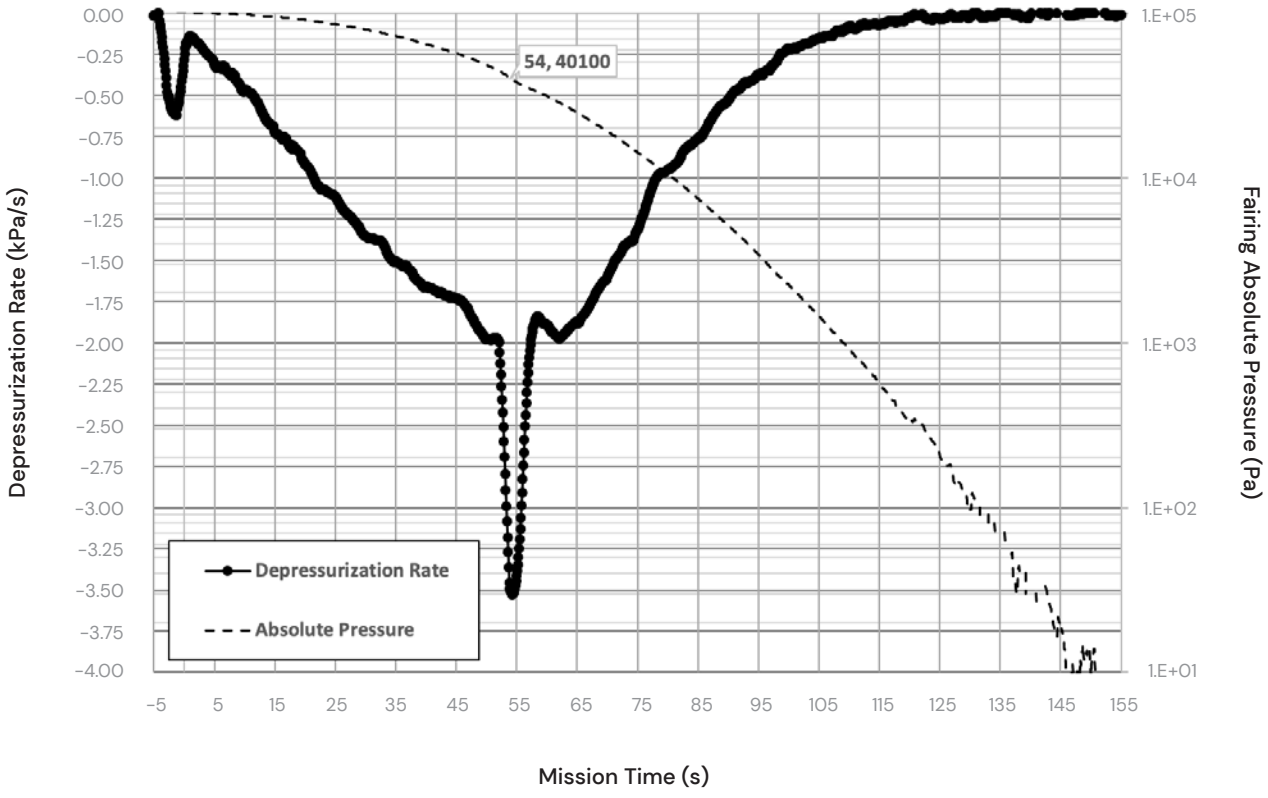
CubeSat Class MPE:
Applicable for satellites with a total mass no greater than 30 kg.

MicroSat Class MPE:
Applicable for satellites with a total mass greater than 30 kg.



VENTING

The fairing compartment depressurization rate is less than 2.0 kPa/sec, apart from a short period during transonic flight with a duration of no longer than 7 seconds. The maximum depressurization rate during transonic flight is no greater than 3.7 kPa/sec. A typical profile of depressurization rate and absolute pressure in the fairing are provided, but is subject to specific trajectory.



SECTION

07

LAUNCH SITES & FACILITIES

AN AMERICAN COMPANY WITH GLOBAL REACH

OUR GLOBAL LOCATIONS

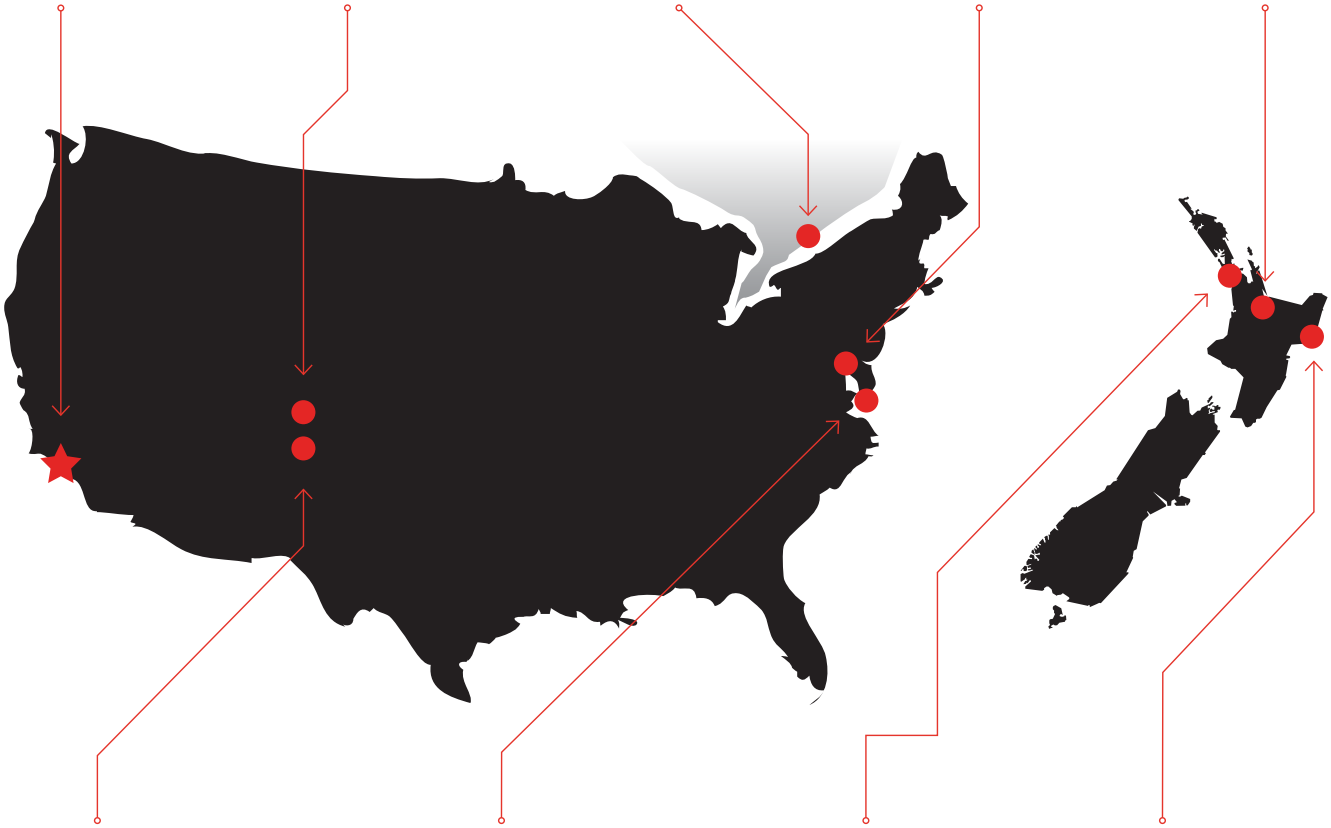
1 Rocket Lab Headquarters, **Long Beach CA**

2 Flight Software and GNC (ASI), **Littleton CO**

4 Star Trackers & Reaction Wheel Production (Sinclair Interplanetary), **Toronto, Canada**

5 Separation Systems and Satellite Dispenser Production (PSC), **Silver Spring MD**

8 Engine Test Complex, **Waikato, NZ**



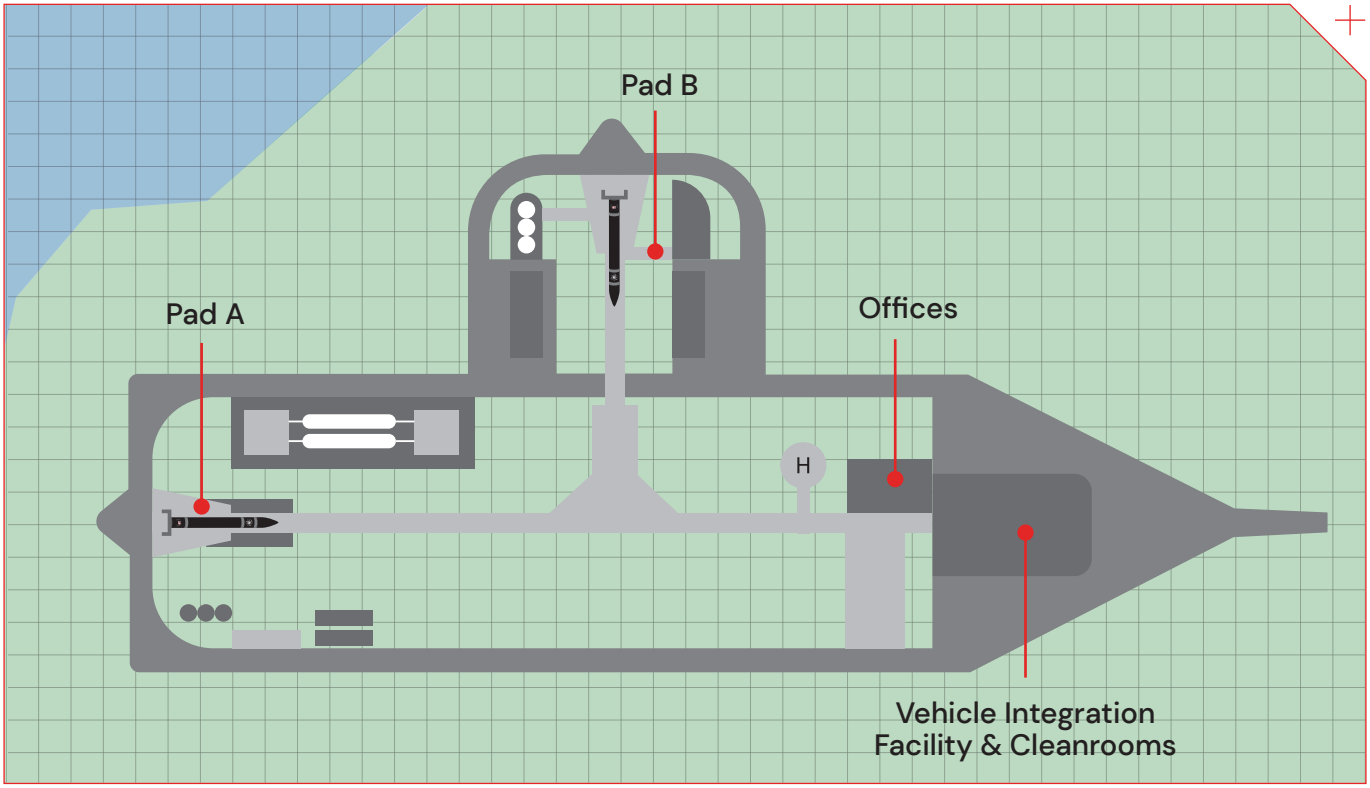
3 Space Solar Technology Production (SolAero Technologies), **Albuquerque NM**

6 Rocket Lab Launch Complex 2, **Wallops Island VA**

7 Rocket Lab Production Complex, **Auckland, NZ**

9 Rocket Lab Launch Complex 1, **Mahia, NZ**

LAUNCH COMPLEX 1, MAHIA, NEW ZEALAND



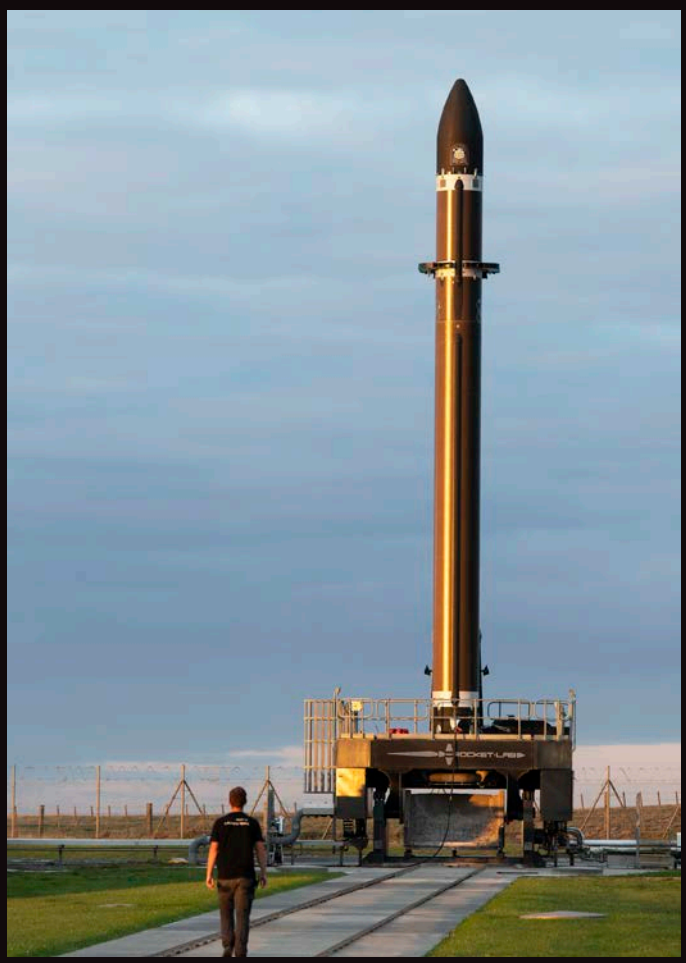
Rocket Lab operates two launch sites comprising a total of three pads for the Electron launch vehicle. Between the two sites, located in Māhia, New Zealand, and Virginia, Rocket Lab offers more than 130 launch opportunities every year. This means our customers enjoy unmatched flexibility for their launch location and schedule.

Rocket Lab operates the world's only private orbital launch range, Launch Complex 1. The Māhia Peninsula-based complex is licensed by the FAA and can support up to 120 launches per year. The site is located at (39.262°S, 177.865°E) in the Hawke's Bay, New Zealand.

Rocket Lab operates two pads at Launch Complex 1; Pad A and Pad B. The operation of two launch pads within the launch complex eliminates the time currently required between launches for a full pad recycle. This enables truly responsive launch opportunities, providing Rocket Lab with the ability to launch back-to-back within hours – not days, weeks or months.

The launch site also includes a Command and Control Facility located 2.5 km from the launch pad. This location houses workstations for flight safety, payloads, launch vehicle teams, and the launch director. This is also the location of the tracking antennas on the day of launch, supported by a downrange facility on the Chatham Islands.


LC-1

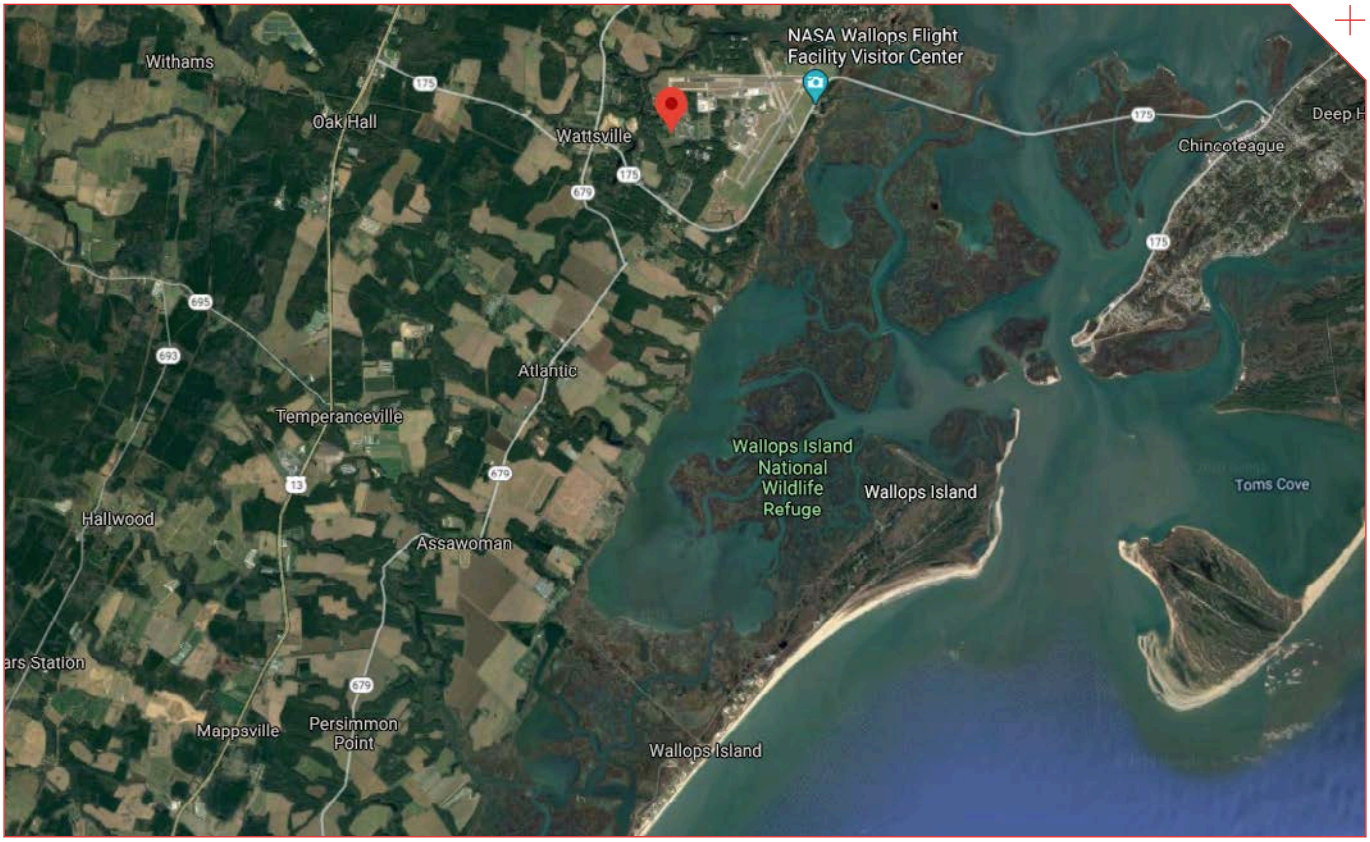



ELECTRON


ELECTRON


LAUNCH TEAM

LAUNCH COMPLEX 2, WALLOPS ISLAND VA, USA



Rocket Lab operates a launch site for the Electron launch vehicle from a dedicated pad located at the Mid-Atlantic Regional Spaceport within the NASA Wallops Flight Facility in Virginia. Launch Complex 2 represents a new responsive launch capability for the United States on home soil.

The complex is tailored for U.S. government small satellite missions, but it can support commercial missions as required. Launch Complex 2 can support up to 12 missions per year. The site is located at 37. 834°N, 75.488°W and can support launches to inclinations between 38 and 60 degrees.

Rocket Lab also operates an Integration and Control Facility (ICF) within the Wallops Research Park. This facility is dedicated to secure vehicle and payload processing facilities. The facility can process several Electron vehicles concurrently, enabling rapid and responsive launch opportunities.

OTHER ROCKET LAB FACILITIES

ROCKET LAB HEADQUARTERS

LONG BEACH CA, USA

In addition to the two launch complexes, Rocket Lab operates a manufacturing headquarters in Long Beach, California, a production complex in Auckland, New Zealand, and test facilities in New Zealand.

Rocket Lab USA headquarters are based in Long Beach, California, five minutes from Long Beach Airport and less than an hour from Los Angeles International Airport. Rocket Lab has dedicated a portion of HQ specifically to our customers, with meeting areas, office space, and a Customer Control Center with connectivity to Auckland, Mahia, and any future launch sites.

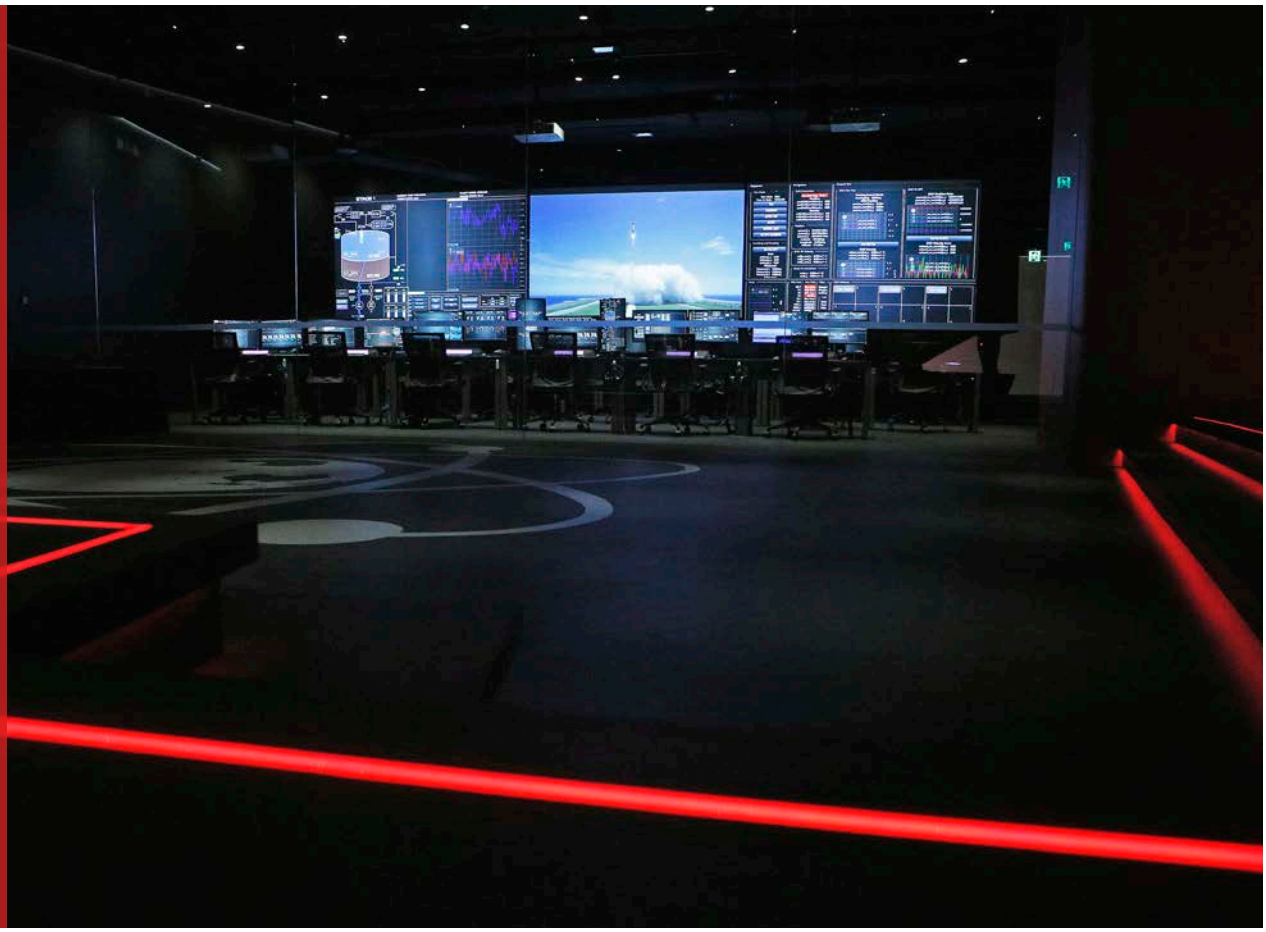
Rocket Lab HQ includes production, payload processing, and office facilities. Rocket Lab's Mission Management team is based within headquarters as well.

ROCKET LAB AUCKLAND PRODUCTION COMPLEX

AUCKLAND, NEW ZEALAND

Rocket Lab's Auckland Production Complex is located 20 minutes from the Auckland International Airport in New Zealand. This facility is the location of Rocket Lab's Research and Development team, and includes engineering, manufacturing, and test personnel under one roof. In addition, Rocket Lab Mission Control is also based in the Auckland Facility. The Mission Control facility also includes a dedicated Customer Mission Operations Room, for use during the launch campaign.

Rocket Lab's engine test cell and stage test cell are also conveniently located within driving distance of the Auckland office.



Rocket Lab's Mission Control Centre
Auckland, New Zealand

Rocket Lab's Long Beach Production Facilities
Long Beach CA

Rocket Lab's Engine Test Cell
Auckland, New Zealand

Rocket Lab's Auckland Production Complex
Auckland, New Zealand

SAFETY & SECURITY

SAFETY

Rocket Lab ensures safety of people and property at all launch and processing facilities through compliance with GSFC-STD-8009 WFF Range Safety Manual for all spacecraft and ground support equipment. Compliance with AFSPCMAN 91-710 will be considered as an alternative at the discretion of range safety.

Hazardous systems and operations typically include chemical, electrical, lifting, mechanical, ordnance, pressurized, propulsion, and radiation systems. Details of these and other systems may be required in the range safety process to assess the hazards and implement controls. Safety controls could include clear zones or verification in procedure.

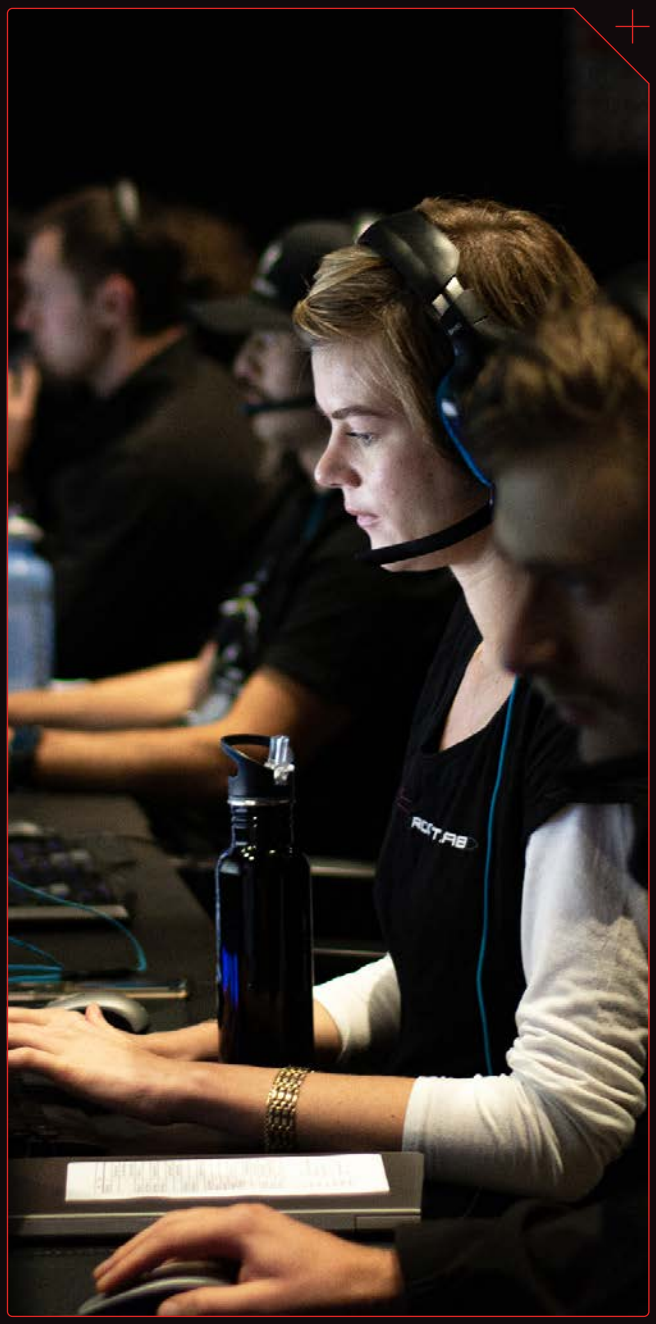
Where requirements are not applicable, or an acceptable level of safety is otherwise achieved, range safety should be engaged for tailoring. Waivers are not considered standard practice.

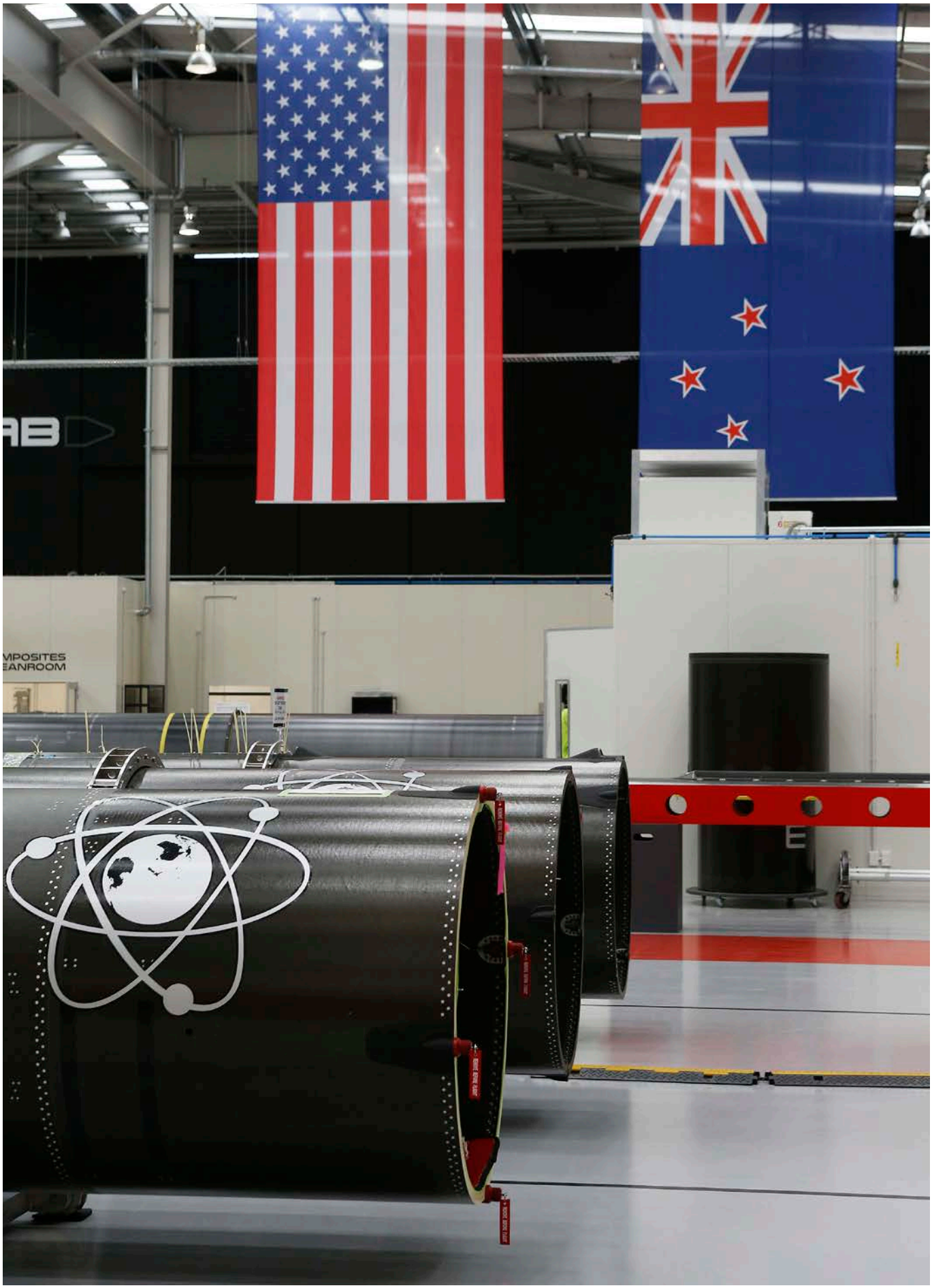
SECURITY

Rocket Lab's security offering provides our clients with total confidence that their security expectations will be met. Proactive environmental scanning, integrated security barriers and systems, 24/7 manned guarding, local authority liaison and coordinated response plans all provide a highly secure launch environment.

On top of that, segregated client suites and clean rooms with additional access control, CCTV and alarm systems allow our clients to take real security ownership of their space.

As a non-standard service we can offer payload security transport planning and escort services from point of arrival to launch site. Our professional security staff will consult with you to meet your specific security requirements.





SECTION

08

PAYLOAD PROCESSING & LAUNCH OPERATIONS

SIMPLE, SEAMLESS, AND TAILORED TO YOUR MISSION

PAYLOAD PROCESSING & LAUNCH OPERATIONS

Payload integration and launch operations have been designed to be simple, seamless, and tailored to your mission. This section covers the typical processing flow of standard Electron missions from Rocket Lab's two launch sites: Launch Complex 1 in Māhia, New Zealand and Launch Complex 2 in Virginia. Rocket Lab can tailor standard payload processing and launch procedures to specific mission requirements as needed.

Customers have the choice of processing their payload at Rocket Lab's state-of-the art payload processing facility (PPF) in Māhia, New Zealand at Launch Complex 1, or at either of the two Rocket Lab PPFs in development in the US at Long Beach, California (Rocket Lab Headquarters), and Wallops Island, Virginia (Launch Complex 2).

The facilities include ISO 8 cleanrooms, dedicated electrical control rooms, and comfortable customer lounge style offices.

Flight 7 'Make It Rain'
Payloads Integrated With Rocket Lab's Kick Stage

STANDARD SERVICES & EQUIPMENT AVAILABLE

- Certified ISO 8 cleanliness level (Class 100K)
  - Relative Humidity: 40-60%
  - Temperature: 63-77°F
- Pass-through between the customer control room and the cleanroom for electrical cables
- Power provided for customer electrical ground support equipment at Standard 110VAC @60Hz (RLHQ) and 230VAC @ 50 Hz (LC-1) Power
- Overhead crane for payload integration operations
- Compressed air, helium, and nitrogen
- Consumables including isopropyl alcohol, lint-free wipes, gloves, gowns, hair nets
- Security is tailored to customer and mission requirements. Available measures include electronic access control, 24-hour facility security guards, closed-circuit video monitoring
- Rocket Lab integration support personnel
- Comfortable lounge-style offices and conference rooms with Wi-Fi, printing, and coffee facilities

ADDITIONAL NON-STANDARD SERVICES AVAILABLE

- Live video feed into the cleanrooms for remote monitoring of payload integration activities
- Fueling carts and procurement of "green" propellants
- Payload EGSE Room Adjacent to Launch Pad
- Customer Range Control Center

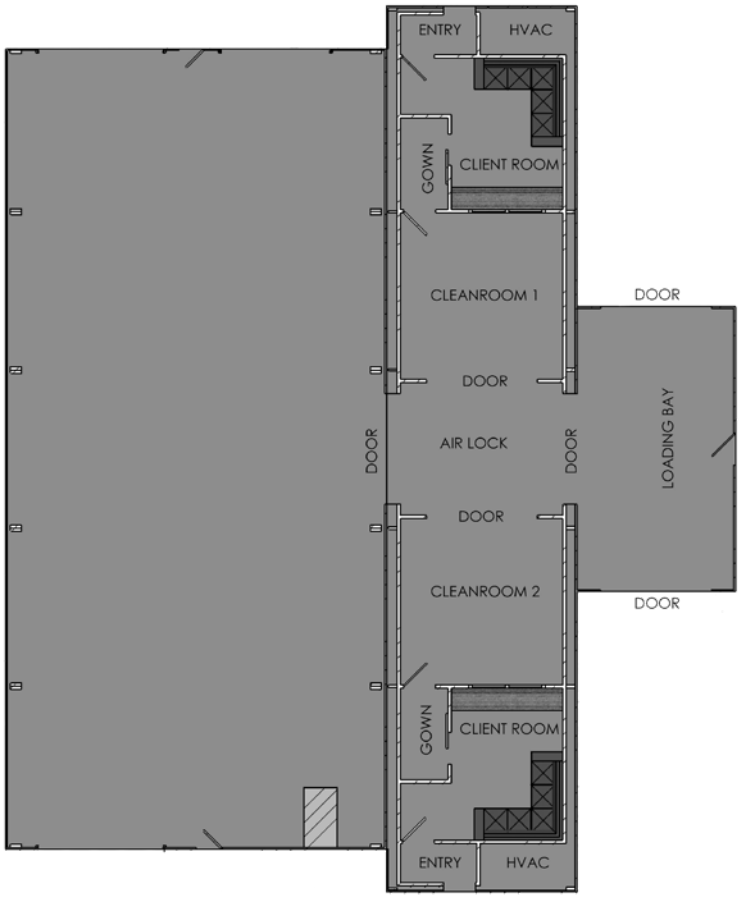
PAYLOAD PROCESSING FACILITY LAYOUTS

LC-1, MAHIA

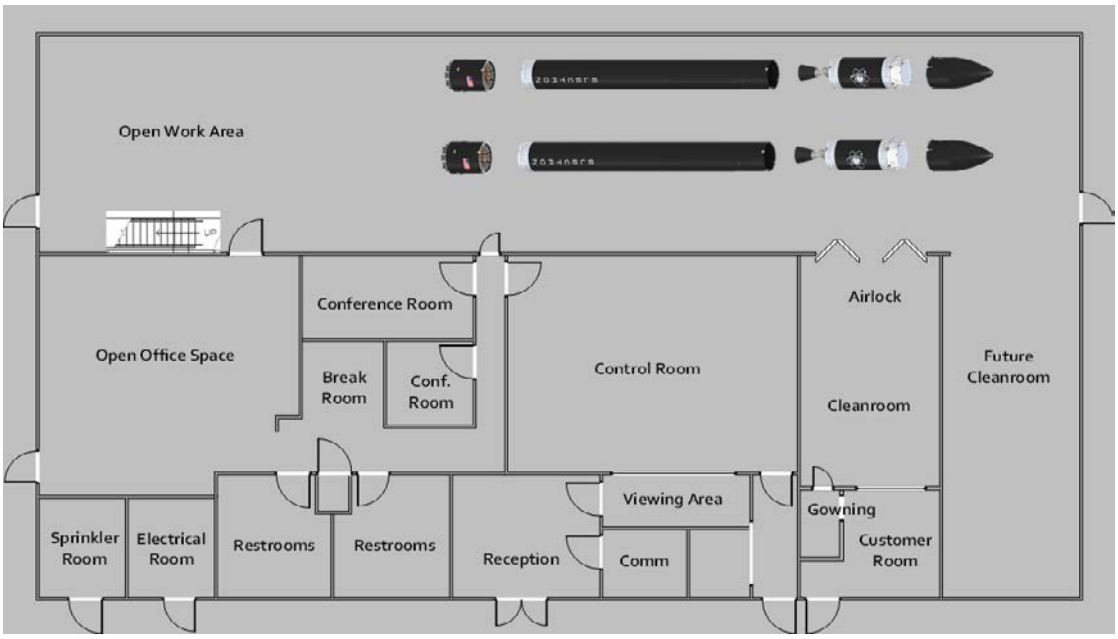
The Payload Processing Facility at LC-1 includes dual customer spacecraft processing areas consisting of a single airlock, dual cleanrooms and gowning rooms, and two separate client areas adjacent to the cleanrooms. The client rooms provide the customer connectivity to their payload and a comfortable work area with desk space, sofas, Internet connectivity, and power outlets.

For missions lifting-off from Launch Complex 1, Rocket Lab also offers a Customer Launch Experience Room (CLER) located at the Range Control Center approx. 2.5 km from the launch pad.

The CLER is a comfortable private facility that provides our customers with panoramic views of the launch pad, enabling them to experience an unrivaled lift-off.

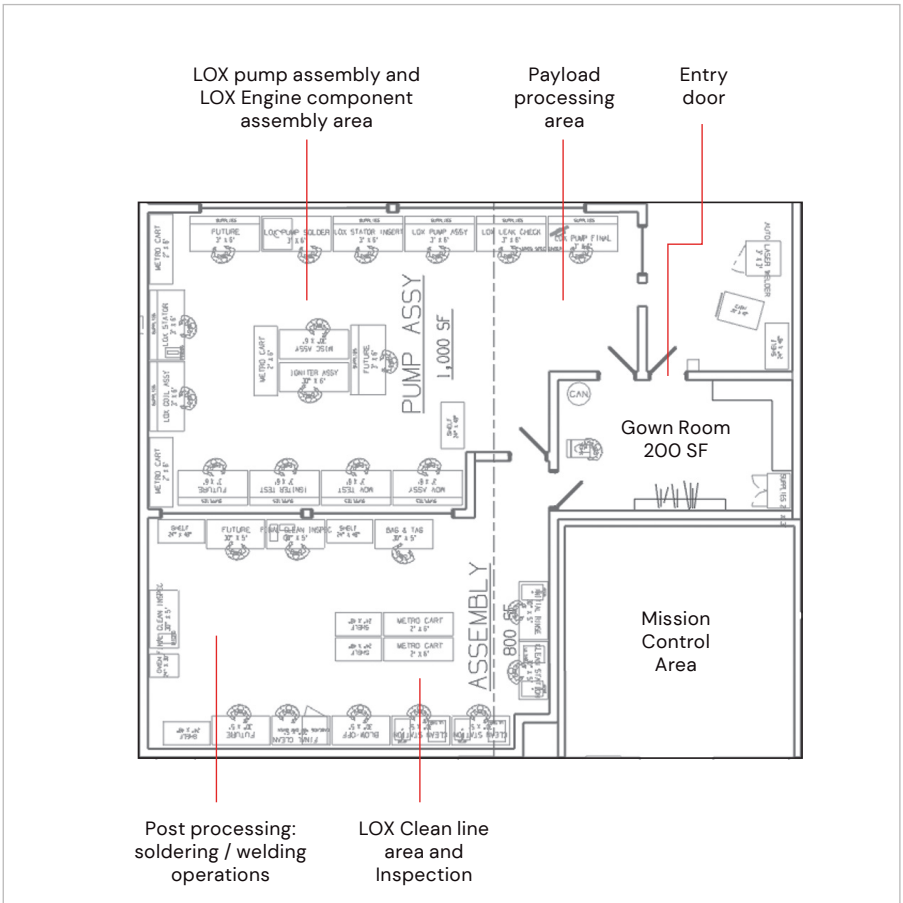


LC-2, WALLOPS ISLAND, VA



ROCKET LAB HQ, LONG BEACH CA

The clean room and payload processing facility at Rocket Lab Headquarters in Long Beach California, currently includes three separate areas: a gowning room, a propulsion components assembly room (pumps and engine components) and payload processing area , and a clean line, inspection and post processing room. The facility is a 2000 sqft ISO 8 (class 100,000) clean room sizing 2000.



PAYLOAD PROCESSING WORKFLOW

We believe the payload processing flow should be simple, seamless and tailored to your mission, which is why we give our customers a choice of integration locations. The Rocket Lab integration team works closely with our customers on all missions, providing support every step of the way.

1. Spacecraft Delivery to preferred PPF (Long Beach, LC-1 or LC-2)
Spacecraft delivery typically occurs 30 days prior to launch, however this timeline can be adapted to specific mission requirements. Once received, Rocket Lab supports customers with unpacking the spacecraft and associated ground checkout equipment.

2. Spacecraft Processing (Long Beach, LC-1, or LC-2)
Customers complete independent verification of the spacecraft, perform final tests, and carry out final preparations such as battery charging, software loading, power ups.

3. Spacecraft Integration
At this point the spacecraft is mated to separation system or payload plate. For customers integrating in Long Beach, the spacecraft can be transported to the launch site mated to the payload plate, or this final mate can occur once the spacecraft has arrived at the launch site. The integrated spacecraft is mated to the custom payload plate on Electron's Kick Stage.

4. Fairing Encapsulation (LC-1 or LC-2)
The integrated spacecraft and separation system on the payload plate (mated with the Kick Stage) is then encapsulated within Electron's payload fairing. Encapsulation occurs horizontally, however the fairing is raised vertical in the cleanrooms for vertical checks.

5. Final mate with Electron LV (LC-1 or LC-2)
Rocket Lab horizontally mates the encapsulated payload assembly to the launch vehicle ahead of wet dress rehearsal and launch.

LATE PAYLOAD ACCESS

It is possible to allow late access to the payload for mission-critical needs on request. Additionally, it is possible for spacecraft to be stored securely at Rocket Lab facilities in a flight-ready state for responsive launch on demand.

TRANSPORTATION

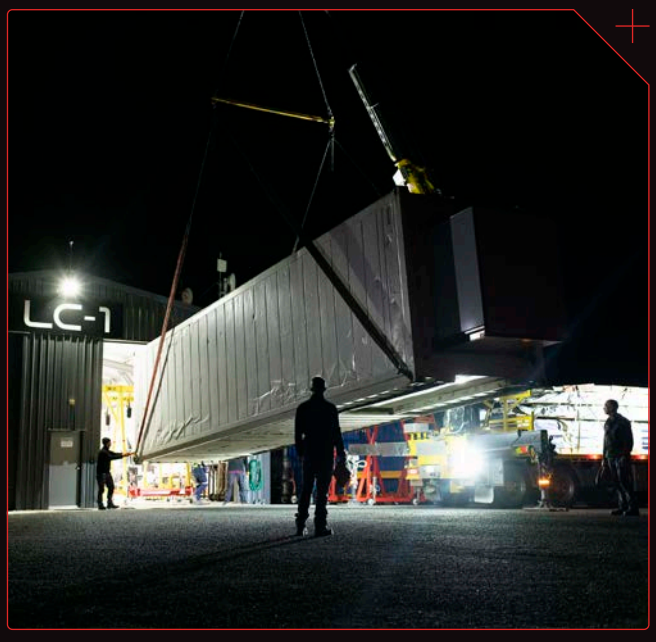
Electron transportation to LC-2
Wallops Island, VA

Payload shipment to the launch site is to arrive no later than 30 days prior to launch. Depending on customer preference, payloads can either be integrated and prepared for shipment in Rocket Lab's Long Beach, CA cleanroom facility, or can be shipped directly to the launch site and integrated in the Payload Processing Facility (PPF) at LC-1.

All payloads will arrive in Auckland, New Zealand to clear customs, then will be transported by ground (or by air, if the customer prefers) to the Mahia LC-1 PPF. Rocket Lab can arrange transportation between Auckland and Mahia as an additional service if requested.

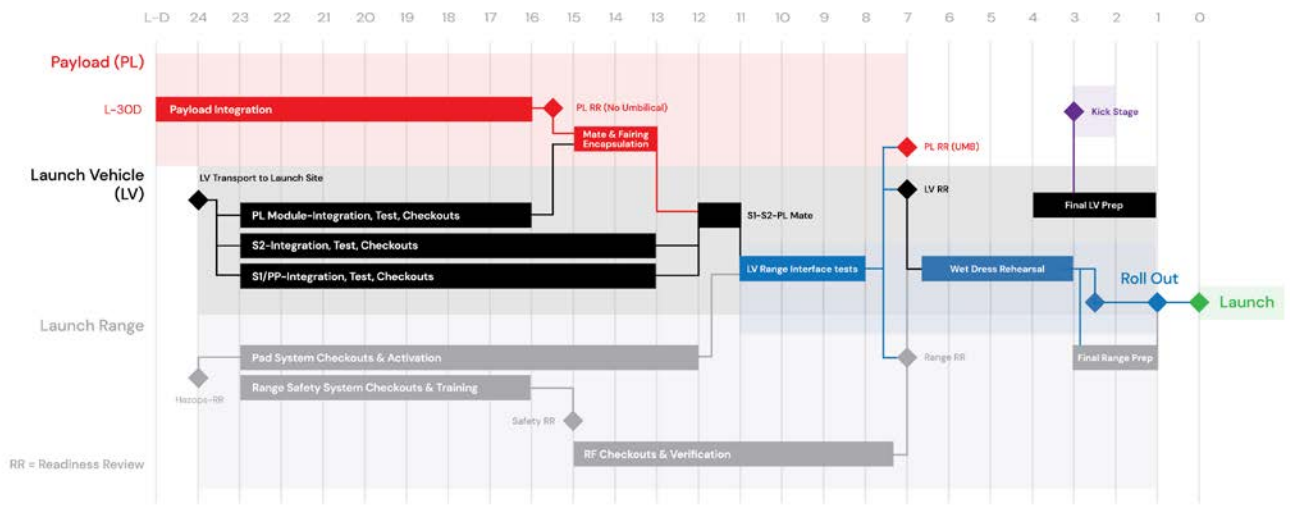
For Rideshare Missions, CubeSats will typically be integrated to their dispensers at Long Beach approximately 40 days prior to launch.

Upon arrival at the LC-1 PPF, the payload is immediately unloaded and transferred to the cleanroom.



LAUNCH OPERATIONS SCHEDULE

EXAMPLE OF STANDARD PAYLOAD PROCESSING SCHEDULE



Example of a Standard Payload Processing Schedule
Note that timelines can be altered upon customer request. Please contact Rocket Lab for more information.

POST-LAUNCH REPORTING

Post-payload separation, within T + 90 minutes, Rocket Lab will deliver a state vector to the customer based on initial data.


ELECTRON

STANDARD SERVICES

As a part of the standard launch service, Rocket Lab offers the following services. Note these services will be included in the mission-specific Statement of Work.

- Commercial mission assurance and risk management
- Dedicated Mission Manager
- Mission integration analyses including dispersed trajectory analysis
- Creation and management of the interface control documentation and associated verification planning and deliverables
- Securing of launch licensing from the Federal Aviation Administration (FAA) with customer inputs, including detailed flight safety analyses
- Electrical interface design and definition from spacecraft separation system to launch vehicle interface
- Temperature, humidity, and cleanliness control in the fairing leading up to launch
- ISO 8 equivalent processing facilities with temperature and humidity control
- Installment of customer logo on payload fairing (dedicated missions only)
- Option to include video (up to 2 minutes) in the Rocket Lab live launch webcast (for dedicated missions only)
- Provision of required signals for payload deployment
- Facilitation of the Range safety review process
- Confirmation of separation and provision of state vector
- Post-flight summary or report
- Weekly integration meetings
- Tracking of meeting minutes and actions items

NON-STANDARD SERVICES

- Provision of spacecraft deployment systems and associated testing hardware (including Maxwell CubeSat dispensers)
- Fit checks at customer facilities
- Payload fueling services and hardware
- Additional analyses (e.g., coupled load analysis and integrated thermal analysis)
- Mission concept and preliminary integration studies
- Provision of spacecraft servicing electrical harnesses and connectors
- External spacecraft umbilical connection to external ground support equipment in cleanroom, hangar, or at the pad
- Enhanced cleanliness controls (ISO 7, GN2 purge)
- Arrangement of payload transportation to launch site
- International Traffic in Arms Regulations (ITAR) – Export compliance support
- Late payload integration (post-wet dress rehearsal)
- Formal technical design reviews (e.g. Critical Design Review & Qualification Design Review)
- Delivery of additional documents such as qualification/acceptance test plans and/or test reports, analysis inputs/outputs
- Mission assurance reviews: critical design review, test readiness review, qualification design review, pedigree review (utilizing Rocket Lab's proprietary Pedigree Portal), recurring program management reviews, launch vehicle readiness review, mission readiness review, flight readiness review)
- Provide insight into quality and range safety programs
- Insight into production activities, including observation of major launch vehicle integration and test milestones
- Requirements analysis, including decomposition, traceability, and validation
- Independent verification and validation (IV&V) and other additional mission assurance
- Qualification matrix
- Change history and first-flight items
- Customer insight on all hardware and mission-specific risks
- Mission-specific day of launch requirements
  - On console
- Participation in go/no-go polling
- Classified reviews/communications and payload processing in Sensitive Compartmented Information Facilities (SCIF)
- Top-level technical design reviews (e.g., mission design review)
- Launch/Range readiness and hardware pre-ship reviews
- Detailed mission/launch campaign integrated master schedule (IMS)
- Mission operations support during launch and payload deployment
- Ground operations and day-of-launch working groups
- Umbilical capability enhancement
- Fit check (options)
  - Separation systems to spacecraft (Rocket Lab provided separation system)
  - Separation system to launch vehicle adapter
  - CubeSat into dispenser
  - CubeSat dispenser to launch vehicle adapter
  - Launch vehicle adapter electrical wire harness checks

SECTION

09

THE TEAM

SUPPORTING YOUR MISSION FROM IDEA TO ORBIT

THE ROCKET LAB TEAM

Rocket Lab is powered by our unstoppable team who support each other, adapt to change quickly, and have fundamentally changed the way space is accessed for the better.

Our people are the most important part of the Rocket Lab launch experience. Our team is driven to broaden the horizons of what's already possible in space and we're inspired by the possibilities not yet imagined. With a 1,200-strong team across California, Colorado, New Mexico, Virginia, Maryland, Toronto, and New Zealand, the Rocket Lab team is dedicated to supporting you through every step of your mission.


ROCKET LAB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International Space Station
ON-RAMP
Moon Ahead

QUICK REFERENCE GUIDE

LIST OF ACRONYMS

CAA	Civil Aviation Authority of New Zealand
CLA	Coupled Loads Analysis
DARPA	Defense Advanced Research Projects Agency
EMC	Electromagnetic Capability
FTS	Flight Termination System
GN_2	Gaseous Nitrogen
GNC	Guidance, Navigation and Control
GPS	Global Positioning System
GSE	Ground Support Equipment
HIL	Hardware In the Loop
IMU	Inertial Measurement Unit
LOx	Liquid Oxygen
LV	Launch Vehicle
MDR	Mission Dress Rehearsal
ONRG	US Office of Naval Research Global
ORS	Operationally Responsive Space
TVC	Thrust Vector Control
UHF	Ultra-High Frequency

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